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PERSONAL.

Mr. Huber B. Card has been appointed City Engineer of Putnam, Conn.

Mr. George A. Wetherbee has been elected City Engineer of Malden, Mass.

Mr. C. P. Weiss, Master Mechanic of the Erie R. R. shops, at Hornellsville, N. Y., has resigned.

Mr. H. C. Frick has retired as Chairman of the H. C. Frick Coke Co., and the office will be abolished.

Mr. Frederic A. Kummer has been appointed General Manager of the Eastern Paving Brick Co., Empire Bldg., New York city.

Mr. Charles A. Moore, of Manning, Maxwell & Moore, of New York city, sailed Jan. 9 for the Mediterranean ports and Egypt.

Mr. P. P. Evans has been appointed Contracting Engineer for the King Bridge Co., of Cleveland, O., in charge of their Boston office.

Mr. S. M. Felton, President of the Chicago & Alton R. R., has assumed the duties of General Manager, Mr. C. H. Chappell having resigned that position.

Mr. J. M. Floosch, Superintendent of the Pittsburg Division of the Buffalo, Rochester & Pittsburg Ry., has been promoted to Chief Engineer in place of Mr. W. E. Hoyt, resigned.

Mr. John J. O'Hara, for the past twenty years Deputy City Engineer of Albany, N. Y., resigned his position Dec. 31, 1899, and has opened an office at 93 State St., in that city.

Mr. Robert Surtees, late City Engineer of Ottawa, Ont., has been appointed Consulting Engineer of the Government Commission appointed to expend $60,000 annually in beautifying the city.

Mr. C. R. Fitch has been appointed General Manager of the New York, Susquehanna & Western R. R. Mr. Fitch has been General Superintendent of the Eastern Division of the Erie R. R.

Mr. F. W. Fratt, who has been Superintendent and Civil Engineer for the Galveston City Railway Co., of Galveston, Texas, has resigned to accept a position with the Southwestern Construction Co.

Mr. M. M. O'Shaughnessy, Consulting Engineer, is making Honolulu, H. I., his headquarters for the coming year. He will be engaged there in connection with the equipment of some large irrigation plants.

Mr. Louis H. Evans, Engineer of Track Elevation of the Chicago & Northwestern Ry., has been appointed Engineer of the Galena Division and the Chicago terminals. The former position has been abolished, the road having practically completed its track elevation work.

Mr. H. C. Griswald, who has been engineer-in-charge of the Louisville & Nashville Terminal Co.'s improvements in Nashville, Tenn., has been appointed roadmaster of the system, with headquarters at Lebanon, Tenn. Mr. M. H. Wright, who has been assistant engineer in connection with the work in Nashville, will succeed Mr. Griswald.

Chief Engineer Joseph P. Mickley, U. S. N., who was attached to the monitor "Terror" when Sampson's fleet went to Porto Rico and bombarded San Juan, has been found physically incapacitated by an examining board from injuries incurred in the line of duty in that expedition, and will be placed on the retired list of the Navy with the rank of commander.

Mr. Robert Black, Roadmaster of the Manhattan Elevated Ry., has resigned that position to become Manager of the Dressel Railway Lamp Works, New York city. He has been connected with the elevated railways since 1867, when he was engaged on the construction of the first experimental length of road in Greenwich St., and he was made Roadmaster of the entire system in 1881. He was President of the Roadmasters' Association of America in 1896.

OBITUARY.

Mr. W. M. Blanchard, mining engineer, died on Jan. 3 at Seattle, Wash.

Mr. Joseph C. Gregg died at Athens, Pa., Jan. 6. Mr. Gregg assisted in the survey of the first railway built in Brazil.

Mr. John Henry Lester, an inventor and pioneer manufacturer of sewing machines, died on Jan. 10 at his home in Brooklyn, N. Y.

Mr. John Quincy Adams Hoyt, one of the original promoters of the present elevated railway system of New York city, died on Jan. 10 at his home in New York.

Mr. J. Ernest Close died in Boston, Mass, on Jan. 3. For several years Mr. Close has been connected with the civil engineering department of the Boston Elevated Railway Co.

Lieutenant Samuel Howard, U. S. N., the pilot and the last of the officers and crew who served on the "Monitor" in her memorable engagement with the Confederate ironclad "Merrimac," died Jan. 15 in Washington, D. C. At the close of the Civil War Lieut. Howard resigned from the Navy and received a commission as lieutenant in the Revenue Marine.

Prof. Thomas Eggleston, Ph.D., LL.D., of the Department of Mineralogy of Columbia College, died in New York on Jan. 15. Mr. Eggleston was born in this city on Dec. 9, 1832, and was graduated from Yale in 1854, and then studied at the Ecole des Mines, in Paris. In 1861 he was appointed Custodian of the Smithsonian Institute, and in 1863 proposed plans for founding the School of Mines of Columbia College, which were realized in April, 1863, and he was for a long time in charge of that department, retiring in 1897. Prof. Eggleston was one of the founders of the American Institute of Mining Engineers, and of the American Meteorological Society; was a Member of the American Society of Civil Engineers; Vice-President of the Academy of Natural Sciences from 1869 to 1881; "Officer" of the French Legion of Honor, etc.

ENGINEERING SOCIETIES.

COMING GENERAL MEETINGS.

AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS.
Jan. 23 to 25. Annual meeting at New York city. Secy., W. M. Mackay, P. O. Box 1818, New York city.
OHIO SOCIETY OF CIVIL ENGINEERS AND SURVEYORS.
Jan. 24 to 26. Annual meeting at Columbus, O. Secy., C. N. Brown, Columbus, O.
ILLINOIS SOCIETY OF ENGINEERS AND SURVEYORS.
Jan. 24 and 26. Annual meeting at Moline, Ill. Secy., Jacob A. Harman, Peoria, Ill.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
Jan. 30. Annual meeting at Montreal, P. Q. Secy., C. H. McLeod, 112 Mansfield St., Montreal, P. Q.
INDIANA ENGINEERING SOCIETY.
Feb. 1 to 3. Annual meeting at Lafayette, Ind. Secy., Jos. B. Nelson, 61 Baldwin Blk., Indianapolis, Ind.
LAKE SUPERIOR MINING INSTITUTE.
Feb. 6. Annual meeting at Iron Mountain, Mich. Secy., F. W. Speer, Houghton, Mich.
AMERICAN PAPER AND PULP ASSOCIATION.
Feb. 14 and 15. Annual meeting at New York city. Secy., C. W. Rantout, 101 Times Building, New York city.
AMERICAN INSTITUTE OF MINING ENGINEERS.
Feb. 20. Annual meeting at Washington, D. C. Secy., R. W. Raymond, 99 John St., New York city.
ASSOCIATION OF ONTARIO LAND SURVEYORS.
Feb. 27 to March 1. Annual meeting at Toronto, Can. Secy., A. J. Van Nostrand, Yonge St. Arcade, Toronto, Can.

COMING LOCAL MEETINGS.

ENGINEERS' CLUB OF COLUMBUS.
Jan. 20. Secy., H. M. Gates, 12½ North High St., Columbus, O.
ENGINEERS' CLUB OF PHILADELPHIA.
Jan. 20. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.
MONTANA SOCIETY OF CIVIL ENGINEERS.
Jan. 20. At Melena. Secy., Albert S. Hovey, Helena, Mont.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
Jan. 23. Secy., W. H. Searles, Case Library Bldg., Cleveland, O.
ENGINEERS' CLUB OF MINNEAPOLIS.
Feb. 1. Secy., H. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.
CHICAGO ELECTRICAL ASSOCIATION.
Feb. 2. Secy., Cloyd Marshall, 1310 Monon. Bldg., Chicago, Ill.
TECHNICAL SOCIETY OF THE PACIFIC COAST.
Feb. 2. At San Francisco. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.
ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Feb. 5. At Buffalo. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.—The 20th annual meeting of the society was held Jan. 16. The annual banquet will be held Feb. 8 at the Schenley Hotel, Pittsburg, Pa. The 8th annual meeting of the chemical section will be held Jan. 18, when Dr. E. S. Johnson will give an address on "Synthetic Indigo."

ENGINEERS' CLUB OF PHILADELPHIA.—The annual meeting of the club will be held on Jan. 20. Mr. Francis Schumann, the retiring President, will deliver the annual address. At the meeting of Jan. 6, a paper by Mr. William B. Wilson was presented, giving biographical sketches of the professional careers of William Hasell Wilson and Herman Haupt. L. F. Rondinella, Secy.

BROTHERHOOD OF STEAM SHOVEL AND DREDGE ENGINEERS AND CRANEMEN.—The fourth annual convention was held Jan. 4 to 7 at Chicago, Ill. Resolutions were adopted urging Congress to improve the waterways of the country, and to build the Nicaragua Canal and deep waterways from Chicago to the Gulf and to the Atlantic sea-board. The following officers were elected: President, Chas. Rees, Chicago, Ill.; Secretary, T. J. Dolan, Chicago, Ill.

THE FRANKLIN INSTITUTE.—The following meetings will be held during the current month: Jan. 19, "Street Scenes in Europe Caught with a Kodak," by Mr. W. N. Jennings; Jan. 23, "Electrical Cutters and Drills in Coal Mining," by Prof. John Price Jackson; Jan. 26, "Scenic and Economic Features of the Windward Islands," by Mr. A. E. Outerbridge, Jr.; Jan. 30, Discussion of the paper of Prof. S. F. Peckham on "Parianite;" Jan. 31, "The Flushing of Culm into Anthracite Mines," by Mr. Wm. Griffith," "Modern Uses of Fuller's Earth," by Dr. David T. Day.

RAILWAY SIGNALING CLUB.—At the meeting held in Chicago on Jan. 9, with Mr. Frank Rhea (Pennsylvania Lines) in the chair, an amendment to the constitution was passed, providing that members whose dues are one year in arrears at the time of each annual meeting shall be dropped from the membership list.

A paper on "Facing Points and Slip Switches," by Mr. A. H. Rudd (N. Y., N. H. & H. R. R.), was read by the Secretary in the absence of the author. An abstract of this paper was given in our issue of Jan. 11. It advocated the use of an electric lock on the tappet of the lever of the signal for the high-speed route, connected with a circuit closer at the facing switch.

In the discussion Mr. Elliott (C., M. & St. P. Ry.) stated that he considered the device a weak one for the purpose. He preferred bolt locks with pipe connections, which arrangement is used on his road. With the lock placed on a concrete foundation the slightest shifting of the track would render the lock inoperative, as there is only an allowance of 1-16-in. for the bolt in the slot. The lock and all parts should be secured to the switch ties. Whether wire or pipe connection are used, there should be an adjustment on each side of the lock. He pointed out that the estimate of $12 must be for the lock alone, while the cost of a complete installation with connections to a tower 500 ft. distant would be about $70. Mr. Miles (Michigan Central R. R.) stated that he fits all main track switches with bolt locks, and employs a spring centering device to prevent the switches from being locked in a wrong connection. Mr. Rhea (Pennsylvania Lines) referred to the Turner facing-point lock used on his road, which is specially advantageous on a four-track road. Mr. Hobson (A. T. & S. F. Ry.) thought the centering device might be operated by a weight instead of a spring. Mr. Sperry (V. S. & S. Co.) thought the suggested method of connecting slip switches would be very complicated on a four-track road.

The first topical discussion was on the use of compensators on bridges, especially where draw spans exist. The speakers who had experience as to this recounted various troubles. Mr. Elliott proposed that instead of having a tower on the draw, there should be a tower on each approach, at a suitable distance back, operating the space between them as a block section, and having the signals electrically locked with the bridge. The next subject was the use of two or more arms on dwarf signals, and this was brought up by a letter from Mr. Cowper (C., C., C. & St. L. Ry.). Mr. Sperry pointed out that some years ago dwarf signals had separate arms or else indicators for the various routes, but that present practice is to use but one blade. Mr. Elliott thought his road might use two arms, following the example of the C. & N. W. Ry. Mr. Hobson instanced a case where two arms are used at a double crossover at the end of a double track section at a yard, where it is important for the enginemen, in pulling out with heavy trains, to know just which route they are getting. The use of yellow for a "calling-on" signal at night was also briefly referred to by Mr. Elliott.

NEW PUBLICATIONS.

PROCEEDINGS OF THE SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION.—Report of the annual meeting held at Columbus, O., Aug. 17, 18, 19, 1899. Vol. VII. Editors: Thos. C. Mendenhall, Ira O. Baker, Albert Kingsbury, Edgar Marburg. Secretary, Edgar Marburg, University of Pennsylvania, Philadelphia, Pa. Cloth; 9 × 6 ins.; pp. 193.

In addition to the official proceedings of the meeting noted, this volume contains the papers presented as follows: Address of Retiring President, Thos. C. Mendenhall; Methods of Teaching Engineering, by text-book, lecture, design, laboratory, memoir, C. F. Allen; The Engineering Educational Value of a Refrigerating Plant, W. T. Magruder; An Apprentice System in College-Shops, O. P. Hood; Engineering Education and Expansion, W. S. Aldrich; The Correspondence School in Technical Education, Edgar Marburg; Advanced Algebra in Engineering and other College Courses, F. L. Emory; Direct Current Laboratory Work in an Electrical Engineering Course, F. W. Springer; A Hydrocarbon Engine Laboratory Equipment, W. T. Magruder; A Comparative Study of the Electrical Engineering Courses given at Different Institutions, F. C. Caldwell; Electric Studies in Engineering Courses, C. R. Jones; The Desirability of Uniformity in the Use of Mathematical Symbols and Terms, and How to Secure such Uniformity, A. E. Haynes; A Convenient Laboratory Equipment for the Study of Direct Current Dynamos and Motors, H. B. Smith; The Relative Distribution of the Instructing Force in Collegiate Departments, J. P. Jackson; The Essentials of a Technical Education, A. L. Rice; A Catalogue and Clipping Case, W. T. Magruder; Drawing Shop Work and Engineering Laboratory Practice in Engineering Colleges. H. E. Smith, Memoirs of Deceased Members.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

MARINE HARDWARE.—The Thomas Laughlin Co., Portland, Me. Cloth; 10 × 7 ins.; pp. 234; illustrated.

The term marine hardware here covers a very wide range of items, from the heaviest anchors to caulking irons. Galvanized wire rigging and its fittings, sheaves and blocks of all types, mast fittings, ship-building tools, sailmakers' tools, derrick winches, chain-cables, etc., form a few of the items here given, with their dimensions and cost.

CAR WHEELS.—Lobdell Car-Wheel Co., Wilmington, Del. Paper; 7¼ × 4⅝ ins.; pp. 30; illustrated.

This is a list of the many types of car wheels made by this company, with tables showing their dimensions, weights, etc. These wheels are for railway purposes, for horse and motor cars, for mining, logging and plantation use.

MINING DREDGES.—Urie Mining Machinery Co., Kansas City, Mo. Paper; 12 × 9 ins.; pp. 47; illustrated.

In this catalogue are illustrated and described dredges of various forms fitted for working on placer deposits and for sluicing and extracting the gold raised with the gravel. The principle employed in all of these is the chain of buckets for lifting the gravel. Other dredges shown are for reclaiming land, lifting sand or gravel, and for prospecting purposes.

MINE RAILWAY WHEELS.—Lobdell Car Wheel Co., Wilmington, Del. Paper; 9¼ × 6 ins.; pp. 20; illustrated.

This catalogue is devoted to a description of the L. R. Faught Patent self-oiling wheels for mine railways and other light service. The hub of this wheel is hollow, with channels cast in it in such manner that the axle is efficiently lubricated without waste of oil; it is also made dust-proof and provided with a long bearing fully protected against undue wear.

CONVEYING MACHINERY AND POWER TRANSMISSION.—Buhl Malleable Co., Detroit, Mich. Paper; 5¾ × 8¾ ins.; pp. 181; illustrated.

This is an illustrated catalogue and price-list of elevating and conveying machinery for various classes of material, sprocket chains and wheels, clutches, elevator buckets, gearing, etc. There are also tables of HP. developed by transmission chains of different sizes, and tables of useful information.

PUMPS.—Edson Manufacturing Co., Boston, Mass. Paper; 9¼ × 6 ins.; pp. 24; illustrated.

This is a descriptive catalogue and price-list of pumps for trench work, pile-sinking, pumping out manholes, ship work, odorless sewage disposal, etc. In connection with the latter purpose, this company furnishes the entire outfit of tank-wagons, hose, etc. It also manufactures the well-known Edson street-sweeper now used in many of the principal cities of the United States.

DRILLING MACHINERY.—Keystone Driller Co., Beaver Falls, Pa. Paper; 11 × 8¾ ins.; pp. 60; illustrated.

The various plants here illustrated and priced are intended for drilling holes for artesian wells, and for test purposes in mining operations or for testing foundation materials. The text gives full instructions for setting up and operating these drills, for dressing the bits, and for making the best use of them under varying circumstances. This drilling plant is self-contained, complete and portable.

BALANCED SLIDE VALVES FOR LOCOMOTIVES.—American Balance Slide Valve Co., San Francisco, Cal., and Jersey Shore, Pa. Paper; 5½ × 4 ins.; illustrated.

This handsome little publication consists of a series of photographs of some 20 representative American and foreign locomotives fitted with these well-known valves, and also photographs of the valves and their parts, with explanatory leaves on inserted sheets, all tied together with silk cord. The photographs are excellent, although so small. Over 10,000 of these valves have been put in service in locomotives, marine engines, etc.

ROCK DRILLS AND AIR AND GAS COMPRESSORS.—Rand Drill Co., New York. Paper; 9 × 6 ins.; pp. 81 and 135; illustrated.

These two handsome catalogues are devoted to describing the types of tools noted above. In connection with a description of machine drills we have useful and special articles on drill steel, with lists and prices; sand pumps; hose and couplings; lubricating oils; subaqueous rock excavations; competitive tests with rock drills on the Chicago Drainage Canal, with cost of drilling with compressed air and steam, and instructions for running Rand drills. The second catalogue describes the air and gas compressors, in all their details, for the several classes of machines. This is followed by special papers on altitude compression; belt-driven compressors; water-impulse compressors; compressors arranged for transportation on mule-back; compressor foundations; tables for flow of compressed air through pipes, or from a reservoir; volume of air required to operate pumps, rock drills and hoisting engines; horse-power developed in compressing 100 cu. ft. of free air, etc.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work. Place.	See Eng. News.
Jan. 19.	Pier extensions, Muskegon, Mich.	Dec. 21
	Advertised, Eng. News, Dec. 21 to Jan. 11.	
Jan. 19.	Government building, Helena, Mont.	Nov. 30
Jan. 20.	Construction materials, Philadelphia, Pa.	Dec. 21
	Advertised, Eng. News, Dec. 21 to Jan. 11.	
Jan. 20.	Locks and dams, Warrior River, Ala.	Dec. 28
	Advertised, Eng. News, Dec. 28 to Jan. 18.	
Jan. 20.	Steel Bridge, Wingham, Ont.	Jan. 11
Jan. 20.	Court house, Dixon, Ill.	Jan. 11
Jan. 22.	Steel and iron, St. Paul, Minn.	Dec. 28
	Advertised, Eng. News, Dec. 28 to Jan. 18.	
Jan. 22.	City lighting, Wichita, Kan.	Dec. 28
Jan. 22.	Lighting franchise, Irvine, Ky.	Jan. 11
Jan. 22.	Water-works franchise, Irvine, Ky.	Jan. 11
Jan. 22.	Electric plant, Frankford, Ind.	Jan. 11
Jan. 22.	Brewery, Fresno, Cal.	Jan. 18
Jan. 22.	Jail, New Orleans, La.	Jan. 18
Jan. 22.	Lock gate, St. Paul, Minn.	Jan. 18
Jan. 22.	Altering building, New York, N. Y.	Jan. 18
Jan. 22.	Engines, etc., Buffalo, N. Y.	Jan. 18
Jan. 23.	Improvement bonds ($5,568,484), New York.	Jan. 18
Jan. 23.	Electric light system, Chicago, Ill.	Jan. 18
Jan. 23.	Pipe and fittings, Washington, D.C.	Jan. 18
Jan. 23.	Naval supplies, New York, N. Y.	Jan. 18
Jan. 23.	Garbage removal, Mt. Vernon, N. Y.	Jan. 11
Jan. 23.	College building, Columbus, O.	Dec. 28
Jan. 24.	Ditch, Champaign, Ill.	Jan. 4
Jan. 24.	Engine house, New York, N. Y.	Jan. 18
Jan. 24.	Water pipe, Boston, Mass.	Jan. 18
Jan. 24.	Sewer improvements, New York, N. Y.	Jan. 18
Jan. 24.	Hospital building, Brooklyn, N. Y.	Jan. 18
Jan. 25.	Bridge, Hoboken, N. J.	Jan. 18
Jan. 25.	Water and other bonds, Pittsburg, Pa.	Jan. 11
Jan. 25.	Laundry building, Whitehall, Wis.	Jan. 11
Jan. 26.	Monument, New York, N. Y.	Jan. 11
Jan. 26.	Waterway, shafts, etc., Valletta, Malta.	Nov. 30
Jan. 26.	Canal improvements, Port Colborne, Ont.	Jan. 4
Jan. 26.	Stone, New York, N. Y.	Jan. 18
Jan. 27.	Reservoir and conduit, Gloversville, N. Y.	Jan. 11
	Advertised, Eng. News, Jan. 11 and 18.	
Jan. 28.	Finishing building, Davenport, Wash.	Jan. 4
Jan. 28.	Public baths, London, England	Dec. 28
Jan. 29.	General supplies, Denver, Colo.	Dec. 28
Jan. 29.	Gas lighting contract, Omaha, Neb.	Dec. 28
Jan. 29.	Pumping engines, Cleveland, Ohio	Jan. 4
	Advertised, Eng. News, Jan. 4 to 18.	
Jan. 29.	Electric lights, Litchfield, Ill.	Jan. 18
Jan. 29.	Railway construction, St. Louis, Mo.	Jan. 18
Jan. 29.	Improving 2 streets, East Chicago, Ind.	Jan. 18
Jan. 29.	Lighting contract East Orange, N. J.	Jan. 18
	Advertised, Eng. News, Jan. 18 and 25.	
Jan. 30.	Breakwater, Bar Harbor, Me.	Jan. 4
	Advertised, Eng. News, Jan. 4 to 25.	
Jan. 30.	Bronze doors, Indianapolis, Ind.	Jan. 11
Jan. 30.	Repairing bridges, Toledo, O.	Jan. 11
Jan. 30.	Tramway rails, Great Yarmouth, Eng.	Jan. 11
Jan. 30.	Paving, Cleveland, O.	Jan. 11
Jan. 31.	Electrical machinery, Plymouth, England	Jan. 18
Jan. 31.	Bonds ($100,000), Indianapolis, Ind.	Jan. 18
Jan. 31.	Water meters, St. Paul, Minn.	Jan. 18
Jan. 30.	Street railway franchise, Massillon, O.	Jan. 18
Jan. 31.	Building, Madison, Wis.	Jan. 18
Jan. 31.	Shafts and tunnel, Carnarvon, Wales	Jan. 18
Jan. 31.	Church building, Warsaw, N. Dak.	Jan. 11
Jan. 31.	Hospital building, New York, N. Y.	Dec. 28
Feb. 1.	School building plans, Toronto, Ont.	Nov. 30
Feb. 1.	Government building, Boise, Idaho	Dec. 7
Feb. 1.	Lighting franchise, Woodland, Cal.	Dec. 28
Feb. 1.	Pier extension, South Haven, Mich.	Jan. 4
	Advertised, Eng. News, Jan. 4 to 25.	
Feb. 1.	Sole plates, Cork, Ireland	Jan. 18
Feb. 1.	Fire houses, Altoona, Pa.	Jan. 18
	Advertised, Engineering News, Jan. 18.	
Feb. 2.	Street bonds ($24,500), Denver, Colo.	Jan. 18
Feb. 5.	Building road, Missoula, Mont.	Jan. 18
Feb. 5.	Pipe and fittings, Perth Amboy, N. J.	Jan. 18
Feb. 5.	Dredging, etc., Philadelphia, Pa.	Jan. 18
Feb. 5.	Improvement bonds, Socorro, N. Mex.	Jan. 18
Feb. 6.	Bridge, Oswego, Kan.	Jan. 18
Feb. 6.	City lighting, St. Louis, Mo.	Jan. 18
Feb. 6.	School building, Fremont, Neb.	Jan. 18
Feb. 6.	Roads, Mount Holly, N. J.	Jan. 18
	Advertised, Eng. News, Jan. 18 and 25.	
Feb. 7.	Paving blocks, Winnipeg, Man.	Jan. 18
Feb. 7.	Street improvement, Cincinnati, O.	Jan. 18
Feb. 7.	Bridge work, Redlands, Cal.	Jan. 18
Feb. 7.	Metal work, Charleston, S. C.	Jan. 11
Feb. 8.	Bridges, Warrensburg, Mo.	Jan. 11
Feb. 8.	Interior decorating, Milwaukee, Wis.	Jan. 11
Feb. 9.	Sewers, Martinsville, Ind.	Jan. 11
	Advertised, Engineering News, Jan. 11.	
Feb. 10.	Electric plant, Monticello, Ark.	Jan. 11
	Advertised, Eng. News, Jan. 11 and 18.	
Feb. 10.	Water-works, Monticello, Ark.	Jan. 11
	Advertised, Eng. News, Jan. 11 and 18.	
Feb. 10.	Electric wiring, Norfolk, Va.	Jan. 11
Feb. 10.	Storehouse and sheds, Buffalo, N. Y.	Jan. 11
	Advertised, Eng. News, Jan. 11 and 18.	
Feb. 10.	Cement, Duluth, Minn.	Jan. 11
	Advertised, Eng. News, Jan. 11 to Feb. 1.	
Feb. 10.	Water pipe, Bath, Me.	Jan. 18
	Advertised, Eng. News, Jan. 18 and 25.	
Feb. 10.	Bridge, double-draw span, Alameda, Cal.	Jan. 18
Feb. 10.	School, San Diego, Cal.	Jan. 18
Feb. 12.	Water bonds ($150,000), Lima, O.	Jan. 18
Feb. 12.	Sewers, Oil City, Pa.	Jan. 18
Feb. 12.	Reservoir, etc., Todmorden, England	Jan. 18
Feb. 12.	Sewer bonds, etc., ($60,000), Lima, O.	Jan. 18
Feb. 12.	Dredging, Milford Haven, Va.	Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 8.	
Feb. 13.	Officers' quarters, West Point, N. Y.	Jan. 18
Feb. 14.	Alms house, Johnstown, N. Y.	Jan. 18
Feb. 14.	Bridge and abutments, Des Moines, Ia.	Jan. 18
Feb. 15.	Guns, etc., Fort Mott, N. J.	Jan. 18
Feb. 15.	Light franchise, Covington, Ky.	Jan. 18
Feb. 15.	Sewers and water-works, Tampico, Mex.	Oct. 12
Feb. 15.	School furniture, Havana, Cuba	Jan. 11
Feb. 15.	Lighting city (1 year), York, Pa.	Jan. 11
Feb. 17.	Ammunition hoists, New London, Conn.	Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 8.	
Feb. 17.	Machine shop, Vallejo, Cal.	Jan. 18
Feb. 17.	Jetties, Jacksonville, Fla.	Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 8.	
Feb. 19.	Water-works material, Starkville, Miss.	Jan. 18
	Advertised, Eng. News, Jan. 18 and 25.	
Feb. 19.	Brick sewer, Fort Wayne, Ind.	Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 8.	
Feb. 20.	Railway franchise, Los Angeles, Cal.	Jan. 18
Feb. 21.	Bridge, Chicago, Ill.	Jan. 18
Feb. 21.	Electric franchise, Vallejo, Cal.	Jan. 11
Feb. 24.	Steel bridge, Hammond, La.	Jan. 18
Feb. 26.	Government building, Topeka, Kan.	Jan. 11
Feb. 26.	Residence, Sacramento, Cal.	Jan. 4
Feb. 27.	Mining lease, St. Petersburg, Russia.	Nov. 2
Feb. 28.	Railway (75 miles), Matthews, Ind.	Nov. 23
Feb. 28.	Bridge, Vancouver, B. C.	Jan. 18
Mar. 1.	Electric machinery, Melbourne, Victoria	Jan. 4
Mar. 1.	Plans municipal bldg., Walsall, England	Jan. 11
Mar. 1.	Water-works, Ada, Minn.	Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 1.	
Mar. 1.	Court house, Blue Ridge, Ga.	Jan. 18
Mar. 1.	Electric plant, Ada, Minn.	Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 1.	
Mar. 5.	Dwelling, etc., Buffalo, N. Y.	Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 8.	
Mar. 10.	Railway, St. Michaels, Azores.	Jan. 11
Mar. 12.	Plans for hall, Belfast, Ireland	Nov. 23
Mar. 31.	Plans for police station, Chelmsford, Eng.	Jan. 18
Aug. 1.	Plans for bridge, Sydney, N. S. W.	Jan. 18
No date.	Electric apparatus, St. Louis, Mich.	Jan. 18
"	Electric plant, Beira, Portuguese E Africa.	Jan. 18
"	Piling for gas plant, Newark, N. J.	Jan. 18
	Advertised, Engineering News, Jan. 18.	
"	Bridge (Howe truss), Harlem, Mont.	Jan. 18

RAILWAYS.

ABYSSINIA.—Reports state that the roadbed for the Djibouti-Harrar Ry. has been built by its French promoters for a distance of 30 kilometers beyond the viaduct of Holl-Holl. The railroad will soon be finished up to the Harrar, whence it will scale the Ethiopian heights to the capital of Abyssinia, Addis Abeba. The line will be about 186 miles long. M. Chetneux, Pres., 5 rue Scribe, Paris, France; A. Suolo, Dir.-Gen., 13 rue Lion Couguiet, Paris.

ATCHISON, TOPEKA & SANTA FE.—The San Rita R. R., extending from White Water Junction to Santa Rita and the Hanover R. R., from Santa Rita to Hanover, both in Grant county, N. Mex., are reported to have been purchased by this company.

AUSTRIA.—A concession has been granted to Alfred Lergetporer, of 3 Nordwestbalmatrasse, Vienna, for a normal gage line from Prossonitz via Nospowitz to Plumenta. ——Lewz & Co., Ltd., of 48 Dorotheenstrasse, Berlin, Germany, have received 1,400,000 marks as a subsidy for a proposed line from Peterswaldau via Oberlangenbielau Silberberg to Mittelsteine.

BALTIMORE & OHIO.—The grade crossing bill of this company just introduced into Congress provides for a five-track masonry viaduct up Delaware Ave., connecting with the Metropolitan Branch in Eckington Ave. with the present Washington Branch at Montello, the lines up First St., T St. and through Trinidad being abandoned. From Eckington to Montello the line will be in open cut. A large terminal station, storage and freight yards are also provided for. In consideration of the surrender by the company of certain rights and privileges in streets and property, it is stipulated that at the completion of the work $1,500,000 be given the company, one-half by the United States, the other half by the District of Columbia. The bill incorporates a terminal company, and gives five years in which to complete the work.——It is reported that it is proposed to expend $25,000,000 in improving the physical condition of this company's road during the next three years.

BARCLAY.—Surveys for the route of this proposed line from Susquehanna, Pa., to Binghamton, N. Y., are being made, according to reports. It is proposed to make the line 14 miles shorter than the Lehigh Valley, Delaware & Lackawanna and Erie routes.

BELGIUM.—The Belgium State Rys. will purchase in January 20,900 pairs of fish plates, 400,000 fish bolts, 600,000 iron rail clamps, etc., and 100 railway carriages. P. T. Blancquaert, Engr.-in-Ch. State Rys., 2 rue Bayaert, Brussels.

BELINGTON & NORTHERN.—This company has been incorporated with $10,000 capital stock to build a road from Charleston to Morgantown, W. Va. Charles F. Teter, Philippi; Floyd Tettor, Belington, W. Va.; J. C. Williams, Ridgeway, Pa.

BISMARCK, WASHBURN & FORT BUFORD.—N. D. Washburn, Pres., is reported to have filed notice of the change of name of this company to Bismarck, Washburn & Great Falls R. R., the intention being to build through Judith basin to Great Falls, Mont. The line will follow the old survey of the Aberdeen, Bismarck and Missouri Valley road to Aberdeen, if the Soo road fails to extend to Bismarck. The line to the coal fields will be fifty miles shorter than any other. Work will begin as soon as the weather permits.

BUFFALO, ROCHESTER & PITTSBURG.—Arthur G. Yates, Pres., with officials of the New York Central & Hudson River R. R., and the Philadelphia & Reading roads, is reported have made inspections of the coal fields of western Pennsylvania, where it is proposed to establish a through coal route from points along the Buffalo, Rochester & Pittsburg to the seaboard.

CANADIAN PACIFIC.—It is reported that this company will make application at the next session of the Dominion Parliament for power to divert its main line from Mission Junction, B. C., to New Westminster, B. C., thereby making New Westminster a main line point in direct connection with Vancouver, B. C., instead of the former branch-line station.

CAROLINA NORTHERN.—H. L. Cummings, Ch. Engr., Lumberton, N. C., writes us that this line, extending through Kingsdale, Proctorsville, Barnesville, N. C., to Marion, S. C., 43 miles, has been located, and that the road between Lumberton and Barnesville, N. C., a distance of 14.3 miles is now under construction, of which 12 miles has been graded and 5.5 miles of track laid. Mr. Cummings stated that the company expected to revise the route from Barnesville to Marion, and that no contracts for that line will be let for some time. Augustus Mellier, Pres., 318 Bourse Bldg., Philadelphia.

CARROLLTON SHORT LINE.—N. A. McCalla, Carrollton, Ala., writes us that the location for this line, 9½ miles long, which will extend from Reform, Ala., to Carrollton, Ala., has been completed and part of the right of way obtained, and the capital secured. Contracts have been partly let to Cochrane & Newel, Reform. Wm. Toxey, Carrollton, and Woolsey Finnell, Tuscaloosa, Ala. The remaining contracts will be let soon.

CEYLON.—The railway recommended by Sir Jos. W. Ridgeway, Governor, Colombo, Ceylon, in a letter to Jos. Chamberlain, Secy. Colonies, London, from Nann-oya to the tea district of Ada Pusselawa will probably be built as a light railway.

CHICAGO GREAT WESTERN.—It has been announced that this company will expend $750,000 during 1900 in the improvement of its tracks and that a large portion of this amount will be used in straightening the line north of Des Moines, south of Baxter and in making heavy fills in the vicinity of East Peru.

CHICAGO, ROCK ISLAND & PACIFIC.—W. E. Danchy, Ch. Engr., Chicago, is quoted as stating that the company will expend $500,000 in repairs, track improvements and bridge work, of which a part will be allotted for repairs to the roadbed, some for the removal of wooden bridges and trestles and for the substitution of permanent steel structures, and some for relaying the track with heavy steel between McFarland and Herington, and Fairbury and Smith Center, Kan.

COLORADO & SOUTHERN.—H. W. Cowan, Ch. Engr., Denver, Colo., writes us that the construction capital has been secured, and the rights of way obtained for this line, which will extend from South Platte to Cripple Creek, a distance of 100 miles, for which surveys have been made. Contracts for construction will be let early this spring.

DALLAS & NEW MEXICO.—This company is reported to have been recently incorporated in Texas with $500,000 capital stock, by H. M. Skelton, Kirk Hall, W. H. McGrath and others, of Dallas. The new company is said to be a reorganization of the old Dallas & Pacific.

DENMARK.—Bids are asked until Jan. 30 for furnishing five express engines, five goods engines and five shunting tank engines for the Danish State Railways. Address the Chief Mechanical Engineer, Colbjornsensgade 6, Copenhagen, Denmark.

DENVER, BOULDER & NORTHERN.—It is reported that this company, recently incorporated, will soon begin the construction of its line to the coal fields, 25 miles west of Denver, Colo.

DULUTH, MISSABE & NORTHERN.—H. L. Dresser, Ch. Engr., Duluth, Minn., confirms the report in our issue of Dec. 28 that the company is building three miles of double tracks from Troctorknott and a double track from Shaw to Wolf, 6 miles. Mr. Dresser also states that there is under construction one double track spur ½ mile long to Spruce mine, at Eveleth; one double track spur ½ mile to Adams mine, Eveleth; John Gulbrauson, contractor, Duluth, Minn., three miles of new line to avoid trestles, and that Barnett & Record Co., Minneapolis, Minn., are building new ore docks and double track trestle approach 2,700 ft. long, all to be completed by May 1. F. T. Gates, Pres., 26 Broadway, New York.

DULUTH, ST. CLOUD, GLENCOE & MANKATO.—A. H. Reed, Pres., Glencoe, Minn., writes us the capital for this company, which is a recent reorganization of the

Glencoe, Duluth & Southwestern Ry. Co., has only partly been provided for. Mr. Reed states that an early construction from Mankato to St. Cloud, Minn., is anticipated. The line will extend from Mankato to Duluth, via Glencoe and St. Cloud, a distance of 242 miles.

ERIE.—Reports state that it is proposed to improve a portion of the system embraced in the Mahoning and Shenango valleys, Pa., this spring. The double tracking, ballasting and straightening of curves on the Newcastle branch, from Sharon to Newcastle, is said to be included in the proposed improvements. J. W. Morris, Chicago, who has charge of the improvements being made at the Ohio plant of the National Steel Co., for this company, will have charge of the work. C. W. Buchholz, Ch. Engr., New York.

GERMANY.—The Aptiengesellschaft fur Baimbau und Betriev, Frankfort, Germany, will soon commence the construction of a branch railway from Herdorf to Wilsersdorf.

GREAT NORTHERN.—N. P. Clough, Vice-Pres., St. Paul, Minn., is reported as stating that it is definitely decided to extend this line from Sioux City, Ia., to Omaha, Neb., and Denver, Colo. It will be necessary to acquire the terminals owned by the Sioux City Terminal R. R. & Warehouse Co., in Sioux City, which will cost about $400,000.

HILGARD, GRANITE & SOUTHWESTERN.—This company was incorporated Jan. 5, and Robert Smith, Pres.; P. S. Stanfey, Vice-Pres.; J. M. Church, Treas., and E. W. Bartlett, Secy. of La Grande, Ore., were elected officers. The road will be built from Hilgard, seven miles west of La Grande, and run up the Grande Ronde river, 60 miles to Granite, the center of a rich mining district. It is announced that work will begin at once, and that the road will be pushed to completion.

JACKSON, SUTTER & AMADER.—Reports state that a company of this name will soon be incorporated, with the intention of building a road from Jackson to Sutter Creek, Cal., by May 1. E. Van Etten, Gen. Supt., the New York Central & Hudson River R. R., New York, is mentioned as president, and W. R. Woodward, Vice-Pres., the Ransburg Ry., Johannesburg, Cal., as vice-president.

JAPAN.—We are informed that two contracts, for 2,570 and 21,526 tons of 60-lb. rails for the certain Japanese railways noted in our issue of Jan. 4, have been let, one for 60-lb. section rail to Mitsui & Co., 445 Broome St., New York, and the other for light 20-lb. section to the American Trading Co., 100 William St., New York. The regulation of the Imperial Government Railways of Japan is to let the contracts at Tokio to Japanese firms who bid to deliver the material in Japan for a certain price, and purchase abroad. There is no competition open to American firms, save by bidding through reputable Japanese houses who are considered responsible at Tokio.

KANSAS CITY, JOPLIN & LITTLE ROCK.—It is reported that this company has been organized in Joplin, Mo., with a capital stock of $3,000,000, to build a road, 120 miles long, from the coal fields of eastern Kansas through the zinc mining district to Aurora, Mo., which will be essentially a coal road. Part of the right of way has been secured and preliminary surveys will be started within 30 days, the line to be in operation within six months. The company will soon be incorporated.

LAKE SHORE & MICHIGAN SOUTHERN.—The control of the Lake Erie & Western R. R., G. L. Bradbury, Vice-Pres. and Gen. Mgr., 623 Monadnock Block, Chicago, Ill., is reported to have been acquired by this company. Chauncey M. Depew, Chn. of Board, New York; W. H. Newman, Pres., Cleveland, O.

LOUISVILLE & NASHVILLE.—It is reported that this company has closed a contract to build 50 miles of road from Georgiana, Ala., on the main line, to a point on the Alabama & Florida Railroad.

MEXICO.—Reports state that the government has granted the Mexican Coal & Coke Co., Mexico City, a concession to construct a system of railroads connecting coal fields in the Barrotoran district, and it is proposed to build lines from that place to Monterey, Torreon, and points on the Mexican National, the Mexican Central and the Mexican International Roads.

MEXICO.—A report to the N. Y. "Times" from Coatzacoalcos, Mex., states that the formal transfer of the Tehuantepec Ry. to Sir Weetman D. Pearson, 10 Victoria St., S. W., London, Eng., by the government under a 50 years' lease took place Jan. 15. This road was 50 years in building and has cost the government $25,000,000. It is now in such shape that its rebuilding is necessary. This will be done by the lessee at a cost of about $2,000,000. The road runs from Coatzacoalcos, on the Atlantic side, to Salina Cruz, on the Pacific, about 190 miles. It was completed by the government about four years ago, and until Jan. 15 it was operated under the government's direction. The road runs through a country rich in tropical resources, and many Americans have settled along the line and have established coffee plantations. Sir Weetman Pearson, contractor, has been negotiating for the lease of this road for several years. He has the contract for making the extensive harbor improvements at Coatzacoalcos and Salina Cruz. The work at Coatzacoalcos includes the dredging and other protective works in the mouth of the Coatzacoalcos River, which will cost about $1,500,000. Salina Cruz is open to the sea, and extensive breakwaters will have to be constructed in that harbor. This improvement will cost about $9,000,000. C. P. Huntington, Pres. Southern Pacific Ry., negotiated with the government for the lease or purchase of this road, but was unsuccessful, owing to the representations made by Pearson that the line was necessary to him in order that he might use it freely in transporting the material, etc., for building the harbor improvements. When Pearson first made his proposition to the government for the lease of the road he was informed that the Seligmans of New York had a prior mortgage on the road by virtue of a loan of $175,000 made to the government. Pearson satisfied this mortgage and secured the lease of the property. The grades are easy ones, being generally less than 60 ft. to the mile. The highest point on the line has an altitude of 720 ft. above the sea level. The representative in Mexico is J. B. Body, 15 Puente de Alvarado, Mexico City.

NEBRASKA & GULF.—Reports state that R. A. Batty, Pres., Hastings, Neb., has begun active work for letting contracts for the construction of this line which will be about 200 miles in length, extending from Running Water, Neb., to a point in Thayer county, on the Nebraska Kensan state line. Surveys between Sutton and Davenport have been completed. (See issue Jan. 4.)

NEW YORK CENTRAL & HUDSON RIVER.—The relaying of 285 miles of single track rails for which the order for 25,000 tons of steel necessary for this work has been placed, is said to be included in the improvement to be made this year. Nearly 1,300,000 new ties, principally of yellow pine, will be needed. The tracks in the tunnel between the 42d St. station and Harlem will be entirely relaid with 100-pound rails, while the other divisions will have new rails as follows: Middle Division, 79 miles; Western Division, 80 miles; Rome, Watertown and Ogdensburg Division, 29 miles; River Division (West Shore), 80 miles; Dunkirk & Titusville Division, 10 miles, and Eastern Division, 7 miles. W. J. Wilgus, Ch. Engr., New York.

PERE MARQUETTE.—The Saginaw, Tuscola & Huron R. R., extending from Saginaw to Bad Axe, Mich., about 68 miles in length, is reported to have been purchased by this system which will give a road running to Port Austin. This company is said to be considering the advisability of building a tunnel between Port Huron and Sarnia to connect with the Canadian Pacific or of constructing a bridge between Detroit and Windsor, Ont.

OHIO & LITTLE KANAWHA.—A charter was issued this company in West Virginia on Jan. 9, to build a road from Burnsville, W. Va., to Zanesville, O. The capital is $10,000. The work of securing right of way and making preliminary surveys will begin at once, according to reports. Frank A. Durban, J. Hope Suter and H. B. Dock, Zanesville, W. Va., are interested.

PENNSYLVANIA.—The contract for constructing the sub-grade of the double tracking east of Canton, O., for this company has been let to Richard Stanton.——It is reported that a link 11 miles in length will be built by this company between the recently acquired Cleveland & Marietta line and Coshocton, to give the road a direct line between Toledo and the Ohio River.

PHILADELPHIA, WILMINGTON & BALTIMORE.—In the improvements which it is said that this company proposes to make in Wilmington Valley, Pa., involving an expenditure of about $5,000,000, is included the removal of the car and machine shops from Wilmington, Del., to a point along Shellpot creek, also the elevation of the tracks and the erection of a large station in Wilmington, Del., is said to be considered.

POCAHONTAS, COAL RIVER & KANAWHA.—The Equitable Construction Co., Chicago, which has the contract for constructing 20 miles of standard gage road up Coal River from St. Albans, W. Va., is reported to have commenced work. The road will penetrate the undeveloped coal and timber fields of Boone county and will probably be extended into the Pocahontas coal section. C. C. Watts, Pres., Charleston, W. Va.

GUAYAQUIL & QUITO.—E. C. Smith, Secy. Ecuador Development Co., 33 Wall St., New York., writes us that work on this line in Ecuador is being rapidly pushed and rails have been already laid on a considerable portion, and other portions of the road have been graded and are ready for the track. The enterprise is in a favorable condition, and it is expected that work will be pushed from this time on with great energy. There is no definite news to give out at the present time in relation to the possible building of a telegraph line recently reported.

ROCHESTER & ST. CLAIR.—This company was incorporated Jan. 11 with $150,000 capital stock to build a road in a direct line from Rochester to Lenore, Mich., a distance of 18 miles, connecting at the latter point with the branch of the Michigan Central R. R. for St. Clair. It will tap the sugar belt of Macomb county and prove a feeder for the sugar factory at Rochester. Justin R. Whiting, Pres., St. Clair, Mich.; Ed. H. Parker, Vice-Pres., Detroit, Mich.; W. H. Acker, Treas. and Secy.

ROCKAWAY VALLEY.—Haines Bros., 100 Broadway, New York, are desirous of letting a contract for constructing an extension of this line from Wainong to Morristown, N. J. The extension, although small, will be expensive.

RUSSIAN SIBERIA.—R. T. Greener, U. S. Commercial Agent ,Vladivostock, reports that in the anxiety to hurry on the construction of both the Siberian and the Trans-Baikal railways a 12-lb. instead of a 24-lb. rail was used and many wooden bridges were built. It is now found that it is impossible to run trains at full speed, and in fact it will be necessary to rebuild most of the lines at a cost of about $7,725,000 for the Trans-Baikal and about $25,750,000 for the Siberian road. The number of stations must also be increased. The Manchurian line will cost about $51,000,000; it is being constructed by a joint-stock company, the Russian government owning most of the shares. L. E. Dandre, Secy. Russian State Rys., Place Michel, 3, St. Petersburg; L. F. Howat, Dir. Manchooria Rys., Vladivostock, Russia.

SAGINAW SOUTHERN.—This company has been incorporated with $50,000 capital stock by I. Benjamin, W. T. Chappell, F. G. Benham, W. G. Emerick, C. E. Linton, of Saginaw, to build a railroad.

ST. LOUIS & NORTHERN ARKANSAS.—Bids are wanted until Jan. 29 for constructing about 50 miles of this road. John Scullin, Pres. the Allegheny Construction Co., Security Bldg., St. Louis, Mo.

SALEM, SOUTHERN & MINERAL BELT.—This company has been incorporated with $1,500,000 capital to build from Salem, Mo., to Batavia, Ark., a distance of about 175 miles. H. H. Artz, B. E. Massey, Mountain Home, and S. H. Henry, West Plains, incorporators.

SOUTHERN.—Reports from Virginia state that it is proposed to extend this line from Round Hill in Loudoun county to Snickerville, about five miles, on the route which was graded some years ago.——Work will begin on Feb. 1, according to reports, on the construction of 200 coal cars at the Lonsdale shops of this company in Tennessee. Benj. Thompson, Res. Engr., Greensboro, N. C.

SOUTHERN INDIANA.—This company has filed a copy of the resolution recently passed by its directors authorizing the extension of its lines from Elnora to Terre Haute, Ind.

UNION CENTRAL.—A. G. Denniston, Secy. and Treas., writes us that the general contract for the entire line of this company, which will be 560 miles long, extending from Waco to Paris through other cities in Texas, has been let, and 25 miles has been sublet. The Atlas Constructing Co., Wortham, Tex., who have the contract, began grading on Jan. 15. It is probable that other contracts will be sublet. The capital has been entirely secured. Cyrus Baldridge, Pres.; Geo. S. Bruce, Ch. Engr., Wortham, Tex. This authentic information confirms a report in our issue of Dec. 21.

UNIONTOWN, WAYNESBURG & WEST VIRGINIA.—This company has been incorporated in Pennsylvania, according to reports, with $1,000,000 capital stock, to construct a road beginning at Wheeling and running to a point where Wheeling Creek intersects the boundary line between the states of Pennsylvania and West Virginia. W. C. Juttle, C. M. Buchanan, C. Cranger and others of Pittsburg, were the incorporators.

WESTERN MARYLAND.—It is reported that preliminary surveys of a cut-off line for this road to run east of Chambersburg, Md., to abolish the steep grades and the dangerous overhead trestles at that place, have been started by E. S. Whitney, Engr., of Philadelphia, with six surveyors.

WILLMAR & SIOUX FALLS.—This company has been incorporated with a capital stock of $2,000,000 to build a railway. W. P. Clough, E. Sawyer, both of Pipestone, Minn., are the incorporators.

STREET AND ELECTRIC RAILWAYS.

FREEPORT, ME.—Local papers state that this town has decided to grant the Lewiston, Brunswick & Bath Electric R. R. no location, unless the company will build a line through South Freeport. The line is proposed to extend to Yarmouth, where it will connect with the Portland & Yarmouth trolley line.

BROCKTON, MASS.—The Pembroke St. Ry. Co. has been incorporated, according to local papers, with $20,000 capital stock, to build a street railway from Hanson through Pembroke to Kingston. The road will be seven miles in length. J. P. Morse, Brockton; E. E. Hill, Pembroke; N. O. Chapman, Canton. The company has received franchises for its line through Kingston.

FITCHBURG, MASS.—Local papers report that a company is being formed with a capital stock of $100,000 to be known as either the Mt. Wachusett Ry. Co. or the Wachusett Mountain Electric Co, to build an electric road to the top of Mt. Wachusett. The Wachusett commissioners have been asked for a franchise for the proposed road. It is proposed to have the line in operation by July 1. F. S. Coolidge, Fitchburg; James A. Stiles, Gardner; Ed. F. Blodgett, Leominster and others are said to be interested.

GREENFIELD, MASS.—The Bay State Construction Co., which is promoting the new Barre St. Ry., has issued a prospectus of the proposed line, which will extend from Barre station to the village, a distance of 3½ miles. A dam will be constructed across the Ware River, a power house built to supply the power for the road, and to furnish power for commercial lighting. The road will cost about $80,000, according to reports.

LENOX, MASS.—Reports state that a company is being formed to build an electric railway in this town to be known as the Lenox Electrical Transportation Co. Preliminary surveys for the line have been made.

BRANFORD, CONN.—It is reported that a new electric road for this town is proposed. The road which is being promoted by the Branford Electric & Water Co. will be via the shore with a terminal at Millplain.

ALBANY, N. Y.—The United Traction Co., embracing the street railways of Albany, Greenbush, Troy and Cohoes, proposes to establish another belt line in the city of Albany to take in that section of the city known as "Arbor Hill." A survey of the section is now in progress under John J. O'Hara, Engr., to determine the best feasible route. This company has been authorized to issue $1,000,000 in new stock, for which to re-equip the Troy division, according to reports. F. N. Mann, Jr., Vice-Pres., Albany.

BROOKLYN, N. Y.—The South Brooklyn Street Ry. Co. has been incorporated to build and operate a road 12 miles long in Brooklyn, by steam or electricity. The road will be used mainly for summer travel. W. Bayard Cutting, New York; John D. Miller, Jr., Brooklyn; Frances H. Bergen, New Brighton, are interested.

NEW YORK, N. Y.—The state board of railroad commissioners on Jan. 8 announced its decision in the matter of the complaint of the Taxpayers Alliance of the Borough of The Bronx, New York city, against the Manhattan Ry., which recommends that the company, without delay, construct its road from 177th St. to Bedford Park.

TROY, N. Y.—Local papers state that J. W. Van Valkenburgh, representing parties in New York and North Adams, Mass., is negotiating for the incorporation of a company to build an electric rialway from Troy to Williamstown, Mass., via Brunswick, Grafton and Petersburg, about 28 miles in length. It is proposed to secure subscriptions amounting to $1,000 to a mile. Samuel Foster, of the firm of Foster, Kelly & Isenberg, of this city, is interested in the project.

ATLANTIC CITY, N. J.—It is reported that plans are being prepared for the construction of an electric railway to connect Absecon with Somer's Point, by way of Pleasantville. A company, capitalized at $200,000, will soon be incorporated to build the road. It is also proposed to furnish lights to Pleasantville.

NEWARK, N. J.—E. L. Price, of this city, is preparing a bill for introduction in the Legislature to authorize the construction of an elevated railroad from Jersey City to Newark and other towns nearby.

BEAVER, PA.—Harry C. Eagle, Harry W. Reeves, Henry Fitzpatrick and Charles H. A. Deens are reported to have applied for a charter for an electric street car line down the Ohio Valley. The road is to connect with the Beaver Valley Traction Co.'s lines at Vanport, making a continuous line from Beaver Falls, Pa., to Wellsville, O., a distance of over 30 miles.

McKEESPORT, PA.—Reports state that the Monongahela St. Ry. Co., the Wilkinsburg and East Pittsburg St. Ry. Co., and the East Pittsburg & Wilmerding St. Ry. Co., are about to be reorganized under the name of the Monongahela St. Ry. Co., with a capital stock of $3,500,000. The addition of 100 cars will be included in the improvements to be made by the new company.

NEWPORT NEWS, VA.—The Hampton Roads Ry. & Electric Co. has been organized to build a new electric railway between Newport News, Hampton and Old Point Comfort, and to supply electric power and electric lights. The company will soon be incorporated, with about $50,000 capital stock. W. J. Nelins, Newport News, and Alvah H. Martin, of Norfolk, are the chief promoters.

MACON, GA.—Local papers state that the construction of the new street railway, to be known as the North & South Macon St. Ry., will be commenced at an early date. The line will extend from Jilesville, South Macon, to the Outing & Recreation club grounds in North Macon.

IRVINE, KY.—Bids are asked until Jan. 22 for the purchase of an electric street railway franchise in this city, according to reports. S. L. Tudor, Chn. Com.

CLEVELAND, O.—It is reported that an extension of the Cleveland, Berea, Elyria & Oberlin St. Ry., from Elyria to Amherst, is to be built, and later an extension to Wellington will make the line 65 miles long. A new $100,000 power house is to be built at Elyria.

DOYLESTOWN, O.—A. E. Townsend, Gen. Mgr., writes us that the contracts for constructing the Barberton, Doylestown & Massillon Electric Ry. Co.'s line, which will be 25½ miles in length, will be let as soon as all franchises are obtained, which will be probably in early spring. Mr. Townsend states that he had financed last fall to build four miles of the road, but as the terminal franchises had not been secured the construction was not commenced. D. King, Canal Dover, O., Pres.; Robt. Gamble, Ch. Engr., Lima. (See issue of Nov. 30.)

MASSILLON, O.—Bids are asked until Jan. 30 for constructing, maintaining and operating a street railway on certain streets in this city. Thos. H. Seaman, Cy. Clk.

BROWNSTOWN, IND.—The county commissioners are reported to have granted a franchise for the right of way from Columbus to Salem for an electric railway.

LOGANSPORT, IND.—The Logansport, Rochester & Northern Traction Co. has been authorized by its directors to issue $2,500,000 in bonds toward the construction and equipment of its proposed electric line, running from Logansport to Kendallville, for which the contract for construction has been let. A power house will be erected at Warsaw, according to reports, to cost about $100,000. J. T. McNary, Pres. (See issue Dec. 7.)

NEW HARMONY, IND.—A. D. Jones, Secy., writes us that the articles of incorporation for the new Harmony & Mt. Vernon Ry. have not yet been filed, and that the amount of capital stock has not been decided on. Mr. Jones states that public sentiment is strongly in favor of the project for which aid will be asked of municipalities interested. No contracts for construction have been let. The line will be an electric one, 34 miles in length, extending through Evansville, Mt. Vernon and New Harmony. A. Dransfield, Ch. Engr., New Harmony.

VERSAILLES, IND.—Reports state that plans for an electric road through this place from Madison to Greensburg are being formulated. Grant Johnson is interested.

OKLAHOMA CITY, OKLA.—The council is reported to have granted a franchise to H. Overholser for constructing a street railway in this city, the line to be built within one year.

PORTLAND, ORE.—A franchise has been granted to Graham Glass, Jr., and E. F. Smith to construct a street railway from the Union Depot on First St. to Hook St., in this city.

LOS ANGELES, CAL.—Bids are asked until Feb. 20 for the purchase of a franchise to construct and operate an electric railway. C. W. Bell, County Clk.

LIVERPOOL, ENG.—C. R. Bellamy, Gen. Mgr. Corporation Tramways, writes us that the contracts have been let and the work well under way for the adoption of the tramways to electric traction.

LONDON, ENG.—J. N. Alison, Secy. Swansea Improvements & Tramways Co., Donington House, Norfolk St., Strand, London, writes us that a deviation of the Swansea & Mumbles Ry., 1½ miles in length, is in course of construction by the Mumbles Ry. & Pier Co. It is intended to equip this railway, which is now leased by the Swansea company, for electric traction, but no arrangements have yet been made.——The British Electric Traction Co., Ltd., Hertford County Council and the Metropolitan Tramways & Omnibus Co., Ltd., and the London County Council are each proposing bills for the constructing of about 31½ miles, 20¼ miles and 15¾ miles of new electric railways, respectively. These are before the Light Railways Commissioners; 43 applications for permission to construct 242½ miles of electric, 141¼ miles of steam and 39¾ miles of either steam or electric roads.

DANZIG, GERMANY.—Kummer & Co. and the Nordische Electricitets Gesellschaft, of Langanu 12, Danzig, will soon commence work on an electric tramway between Danzig and Neufahrwasser; estimated cost about $250,000.

ZUAIM, AUSTRIA.—Rudolf Loos, of Zualm, in Moravia, has received a concession to commence the construction of an electric road from Zualm to Frain and vicinity.

ST. PETERSBURG, RUSSIA.—It has been decided by C. A. Messoyedoff Ivanoff, of Fontanpa 117, Ch. Engr. State Railways, to adopt the overhead electric system for the tramways.

TONKIN, INDO-CHINA.—The governor of Tonkin has recently ordered a steam tramway in the province of Hai Duong, between Ninh-Gian and Kesat.

ELECTRIC LIGHT AND POWER.

BRAINTREE, MASS.—It is reported that $26,000 has been voted for improving the plant.

MELROSE, MASS.—It is said that a majority of the aldermen are in favor of a city plant.

SPRINGFIELD, MASS.—The United Electric Light Co. has increased its capital $250,000 for a storage battery plant.

EAST GREENWICH, R. I.—A 15-year franchise has been granted to the East Greenwich Electric Co.

AVON, N. Y.—The Avon Electric Co., it is stated, will extend its plant.

DUNKIRK, N. Y.—The water commissioners proposed to add 75 new lights to the capacity of the plant, according to reports.

HOOSICK FALLS, N. Y.—The Hoosick Valley Ry. Co proposes to build a power plant, 50 × 100 ft., with a 100-ft. chimney. Some of the material has already been bought.

OSWEGO, N. Y.—The contract for lighting the city for five years has been let to the People's Electric Light Co. Improvements to the plant will be made at once.

SENECA FALLS, N. Y.—W. M. Follet, Pres., writes us that a 5-year contract for electric lighting will soon be let; population, 7,000.

EAST ORANGE, N. J.—Bids are asked until Jan. 29 for electric lighting for five years from June 1, as described in our advertising columns. S. M. Long, Cy. Clk.

JERSEY CITY, N. J.—The Free Library Trustees will ask for new bids for a plant for the building.

CORRY, PA.—G. A. Nantes, Cy. Clk., writes us that the bids for electric lighting received Jan. 8 have been rejected, and new bids asked. The bids are given under Contract Prices. The contract will be for furnishing 80 2,000-c. p. arc and 50 16-c. p. incandescent lights. Frank Bliss, Chn.

MERCHANTVILLE, N. J.—It is proposed to consolidate the companies in Haddonfield and certain other West Jersey towns, and to build a central plant at this place.

PITTSBURG, PA.—It is stated that the Monongahela Consolidated Coal & Coke Co. will erect three electric power houses at different points along the river to furnish power for the operation of its mining machinery. The plants will be at Gastonville, Brownsville and Monongahela, and will cost about $150,000. Orders have been placed for 35 electric and 7 compressed air mining machines for use in the mines nearest the proposed power houses.

READING, PA.—The Metropolitan Electric Co., the Berks Electric Light, Heat & Power Co. and the Neversink company have applied for franchises to erect plants.

STEWARTSTOWN, PA.—Arrangements are reported as being made for a plant.

BALTIMORE, MD.—Mayor Hayes has appointed the following as a committee to investigate the question of a city plant: Jacob H. Hollander, of Johns Hopkins University; Edwin G. Baetjer, a lawyer, and Chas. E. Phelps, Jr., Ch. Engr. Electrical Subway Commission.

CHARLOTTESVILLE, VA.—The Virginia Ice Co. will extend its ice plant, erect an electric plant, etc., according to reports. C. J. Rixey, Secy.

LAURENS, S. C.—The Laurens Laundry Co., it is stated, wants bids for a plant with a capacity for 20 lights.

YORKVILE, S. C.—T. B. McClain has been granted a 20-year franchise for a plant, and an election to confirm it will soon be held.

LEXINGTON, GA.—T. G. Lester, Clk., S. C. O. Co., writes us that the company will put in a plant with 250 16-c. p. light capacity. Estimates are wanted for a plant, except boilers, engines and buildings. Geo. H. Smith, Engr.

PELHAM, GA.—Bids are wanted by J. L. Hand, Pres. Pelham Mfg. Co., for furnishing materials for a plant, according to reports.

GREENSBORO, ALA.—J. E. Webb, P. O. Box 499, Birmingham, Ala., it is reported, will build a plant in connection with the water-works, to have 40 arc and about 1,000 incandescent lights.

MORRISTOWN, TENN.—A new plant to have a capacity for 1,000 incandescent lights is proposed, according to reports.

COVINGTON, KY.—Bids are asked until Feb. 5 for the purchase of an electric plant franchise and for lighting the city for 20 years. J. T. von Hoene, Cy. Clk.

COLLINWOOD, O.—The council will soon advertise for bids for a plant to cost $18,000, according to reports.

HAMILTON, O.—It is proposed to extend the plant and gas works. J. E. Lohmann, Dir.

SHELBY, O.—An election will be held Jan. 20 to vote on the question of issuing $15,000 in bonds for a new engine, etc., for the plant.

ANDERSON, IND.—Fred. Sargent, 1143 The Rookery, Chicago, is reported as preparing plans for extending the city plant, to cost about $20,000. The contracts will be let about Feb. 1.

BATTLE CREEK, MICH.—The Kalamazoo Valley Electrical Power Co., which intends to transmit power from Allegan to Kalamazoo, Battle Creek, Marshall, Albion and Jackson, has asked for a 30-year franchise.

IRON RIVER, MICH.—An election is reported to have been held Jan. 15 to vote on the question of issuing $6,000 in bonds for a plant.

MENOMINEE, MICH.—The question of developing the water power at Grand Rapids on the Menominee River, 15 miles from here, is reported as again being considered; cost, $150,000. C. B. Pride, Engr., Appleton, Wis.

ST. LOUIS, MICH.—Bids are asked by E. Arnold, Chn. Lighting Com., for furnishing two 45-K-W. generators for a 3-wire system.

CARBONDALE, ILL.—C. A. Iglehart & Co., 159 La Salle St., Chicago, are said to have submitted the only formal bid for constructing a plant and water-works, at $75,000. F. M. Caldwell, Cy. Clk.

CHICAGO, ILL.—Press reports state that water power sufficient to operate the city pumping stations and lighting plants for 75 years will be turned over to the city by the Sanitary Board. By the terms of the agreement, which will in all probability be ratified by the drainage board and the council, all the water power privileges generated at Lockport by the opening of the new drainage canal will be transferred to the city at the rate of $4 a horse power. The amount of power which it is estimated will be created at Lockport is about 25,000 HP. The conditions limit the use of the water power by the city for municipal purposes only. The city will bear the cost of building the improvements necessary at Lockport in order to use the power.

CHICAGO, ILL.—Bids are asked until 4 p. m. Jan. 23 for furnishing and installing 19 electric lamps, posts, switches, insulators, pole wires, and posts, 21 brick manholes with iron cover; 8,600 ft. of 3-in. tile and trench; 8,700 ft. of lead-covered cable, on Washington Boulevard. E. G. Schubert, Secy. Chicago Park Comrs.

LITCHFIELD, ILL.—Bids are asked until 1 p. m. Jan. 29 for furnishing 61 or more 2,000-c. p. arc lights for one or five years. Hugh Hall, Cy. Clk.

ADA, MINN.—Bids are asked until March 1 for furnishing the materials and for constructing a plant and water-works, as stated in our advertising columns. G. A. Ralph, Engr., Crookston, Minn.; F. M. Calkins, Village Recdr.

ARLINGTON, MINN.—Theo. Strinsguth, Pres. Council, writes us that it is likely that bids will be wanted early in March for a complete plant. F. W. James, Village Recdr.

DULUTH, MINN.—At the spring election the city will vote on the question of issuing $110,000 in bonds for a city plant. Address Mayor Truelsen or Alderman Crowley, Chn. Com.

ELBOW LAKE, MINN.—The question of building a plant will soon be submitted to a vote of the people, according to reports.

ALLIANCE, NEB.—The council, it is stated, is considering propositions for a new plant.

CALDWELL, KAN.—The question of issuing $25,000 in bonds for a plant and water-works will probably soon be held.

KANSAS CITY, MO.—The control of the property of the Edison Electric Light & Power Co., it is stated, has been secured by P. D. Armour, 205 La Salle St., Chicago; Robt. Fleming, of London, Eng., and C. E. Holmes, of Kansas City Metropolitan St. Ry. Co. About $500,000 will be spent on improving the property. E. R. Weeks, Gen. Mgr.

ST. JOSEPH, MO.—It is reported that about $15,000 will be spent on improving the plant. Address Alderman Garvey.

ST. LOUIS, MO.—Bids are asked until Feb. 6 for lighting the streets, parks, and other public property north of Keokuk St., for a term of ten years from Sept. 1, 1900. The contract is in two lettings, one for furnishing 600 incandescent and 900 arc lights, and the other for 11,000 lamps with refractory mantles made incandescent by the combustion of a hydro-carbon gas to an illuminating power equal to 60 standard candles. E. S. Foster, Secy.

SPRINGDALE, ARK.—The question of building a plant and water-works is being considered, according to reports.

COLORADO SPRINGS, COLO.—The question of granting a franchise to the Citizens' Light, Heat & Power Co. is being considered. The company proposes to build a plant at the coal mines, five miles from here, owned by R. P. Davie and McKinnie, who are interested in the electric company; estimated cost, about $225,000. E. E. Wade, Engr.

DENVER, COLO.—C. P. Allen, Ch. Engr., Denver Union Water Co., writes us that it is proposed to use the reservoir now under construction by the South Platte Canal & Reservoir Co. in connection with a plant to develop about 10,000 HP.; estimated cost, about $1,400,000. Two parties are in the field locating conduit line. The dam at the reservoir now up 35 ft., and will be up 100 ft. by May 1, and will compound 75 billion gallons.——The ordinance granting a franchise for an electric and gas plant to the Bennett & Myers Co., noted last week as having applied, is being considered by the council. The Denver, Boulder & Northern Ry. Co. has also submitted a proposition.

SEATTLE, WASH.—The council is considering ordinances for a municipal plant to cost $150,000, either by purchase or erection. The question will be submitted to the voters. Councilman Gill, Chn. Com.

ATHENA, ORE.—It is reported that T. J. Kirk, Jos. France and C. A. Barrett are interested in the proposed electric plant.

PAYETTE, IDAHO.—We are informed that the Payette Power & Lighting Co. has not yet been incorporated. Parties are in litigation over the dam site, but matters will probably soon be adjusted. Surveys have been made, but no plans prepared. A. J. Wylie, Des. Engr., Boise, Idaho; C. K. Bannister, Ch. Engr., Ogden, Utah.

PLYMOUTH, ENG.—Bids are asked until Jan. 31 for furnishing a 500-K-W. dynamo, 500-K-W. alternator, 230 accumulator cells, four boilers, mechanical stokers, mains, etc. J. H. Rider, Elec. Engr.; J. H. Ellis, Town Clk.

DUBLIN, IRELAND.—Robt. Hammond, Elec. Engr., Westminster, London, has submitted a report for a new plant to cost about $1,250,000. Spencer Harty, Borough Engr.

BLANENESE, GERMANY.—The burned electric plant, it is stated, will soon be rebuilt at a cost of about $95,000.——A plant will also be built in Kosten, Prussia, population, 5,000.——A. G. Ringwald & Co., owners of the collieries at Gengenbach, Prussia, intend installing a power station at the collieries. The electrical energy is to be used for lighting and power purposes in the surrounding district.

STRASBURG, GERMANY.—The city council, it is reported, has made a contract with a new electric company to put in a plant. The company will pay a bonus of $110,000 for the franchise, as well as the customary taxes.

BEIRA, PORTUGUESE EAST AFRICA.—Bids are asked by the Companhia de Mocambique, 13 Austin Friars, London, Eng., or 45 Rua do Alecrim, Lisbon, for furnishing the material and for constructing a plant, including the exclusive privilege of working same for 25 years.

NEW COMPANIES.—The Oakland Electric Co., Waterville, Me.; $10,000; H. D. Eaton, Pres.; G. K. Boutelle, Treas. Pres. Eaton writes us that this is a new corporation to carry on an old business. Power will be taken from the plant of the Union Gas & Electric Co., in Waterville, the plant in Oakland being abandoned.

Contra Costa Electric Light Co., Port Costa, Cal.; $20,000; J. Mayo, L. A. Reniff.

Niagara Falls Gas & Electric Light Co., Niagara Falls, N. Y.; $100,000; H. Highland, A. A. Oatman.

Boston Wyoming Smelter, Power & Light Co., Trambach Water-Works Co., and the Emerson Electric Co., Encampment, Wyo.; $60,000 each; W. G. Emerson, W. R. Thompson, Denver, Colo.

Highland Canal & Power Co., Minneapolis, Minn.; $50,000; R. J. Powell, H. H. Steele.

Citizens' Electric Light & Power Co., St. Louis, Mo.; $6,000,000; J. S. Walsh, Pres.; Breck Jones, Treas.

Utah Light & Power Co., Salt Lake City, Utah; $3,500,000; G. Q. Cannon, Pres.; L. S. Hills, Treas.

Stanley Electric Co., Trenton, N. J.; $2,000,000; F. O. Briggs, W. H. Gandy.

Pfingst-Spiller Power & Auto-Vehicle Co., Trenton, N. J.; $350,000; W. H. Jaques, L. Pfingst.

New Brighton Electric Light, Heat & Power Co., New Brighton, N. Y.; $1,000; W. Irving.

Consolidated Ry., Electric Light & Equipment Co., Trenton; $16,000,000; Wm. W. White, New York; Frank C. Rowley, Brooklyn.

Utah Light & Power Co., Salt Lake City, Utah; $3,500,000; G. Q. Cannon, J. P. Winder.

National Power Co., Kittery, Me.; $1,000,000; W. E. Taft, B. F. Tripp.

BRIDGES.

MARSHFIELD, MASS.—The county commissioners have voted to build a new bridge over North River, connecting Humarock Beach with the mainland, to replace the present structure.

ALBANY, N. Y.—The following contracts have been awarded by J. D. Partridge, Comr. Pub. Wks., for bridge work: For rebuilding abutments of bridges 39 and 40, Erie Canal, west of Cohoes, Barker & Judson, Gloversville, at $3,055. For rebuilding an abutment of bridge 103, near Dunham's Basin, Champlain Canal, Flood & Sherrell, Sandy Hill, at $1,066.

FULTON, N. Y.—O. C. Breed, Cy. Engr., Fulton, writes us that the date for receiving bids for constructing the proposed bridge across the Oswego River has not been decided on. Chas. Stowell, Des. Engr., Albany.

LOCKPORT, N. Y.—An appropriation of $50,000 will be asked for the construction of a bridge over the canal at Pine St.

NEW YORK, N. Y.—It is reported that bids will be received until about Jan. 30 for borings and soundings for the two proposed East River bridges. John L. Shea, Bridge Comr., 21 Park Row.

HOBOKEN, N. J.—Bids are wanted by the board of freeholders until Jan. 25, according to reports, for constructing a bridge over the Pennsylvania R. R. cut at Baldwin Ave.

CHARLEROI, PA.—The Charleroi & Monessen Bridge Co. has been incorporated, according to reports, to construct a bridge connecting the towns of Monessen and Charleroi at Lock No. 4. Capital stock, $1,000. E. P. Douglas, J. C. Smith and E. F. Woods were the incorporators.

SCRANTON, PA.—Jos. P. Phillips, Cy. Engr., writes us that the ordinance providing for the construction of a viaduct on West Lackawanna Ave. was signed by the mayor on Jan. 11. The proposition will be submitted to vote at the spring election, to be held Feb. 20.

WILKESBARRE, PA.—The grand jury has approved the purchase of the bridge crossing the Susquehanna River between Nesconeck and Berwick, at a cost of $25,349.

HAMMOND, LA.—Bids are asked until Feb. 24 for constructing a steel bridge at this place, according to reports. Ed. Goodkin, Pres. Police Jury.

LAKEWOOD, O.—The Osborn Co., the Osborn Bldg., Cleveland, O., has completed plans for the superstructure of the Lakewood bridge. This bridge will carry the Nickel Plate R. R. tracks over the Boulevard. Contracts will soon be let by the authorities of Lakewood. Hamlet. Estimated cost, $11,000. R. J. Wood, Hamlet Engr.

TOLEDO, O.—Willis F. Brown, Cy. Engr., writes us that no legislation has been started for the proposed bridge at Jefferson St.

YOUNGSTOWN, O.—The question of constructing a viaduct over the McGuffey St. crossing is being discussed according to reports.

MEROM, IND.—Petitions for a bridge over the Wabash River at this place have been prepared by the citizens of Sullivan county, Ind., and Crawford county, Ill., who will submit them to Congress for an appropriation of $150,000 for its construction.

GRAND RAPIDS, MICH.—The following estimates of cost of widening the East Bridge St. canal bridge to a width of 100 ft., as requested by the council Dec. 11, were submitted by City Engineer Ames on Jan. 5 to the board of public works: Z-bar and plate iron floor system, asphalt pavement and cement walks, $14,982; buckle plate iron floor, asphalt pavement and cement walks, $11,708; creosoted wood floor system, creosoted block pavement and tar sidewalks, $6,580.——Local papers state that the Grand Rapids & Indiana Ry. will construct four new steel bridges on its line this year. E. H. Barnes, Res. Engr., Grand Rapids.

CHICAGO, ILL.—Local papers state that plans are being prepared by City Engineer Ericson for bridges at Division St., Clybourn Place, Weed St. and 95th St.——The erection of an iron bridge is said to be included in the proposed improvements to be made by the Chicago, Burlington & Quincy R. R. during 1900. H. P. Burgess, Engr. Bridges, Aurora, Ill.

CHICAGO, ILL.—Bids are asked until Feb. 21 for constructing a bridge over the Chicago River at Canal St., according to reports. Jos. F. Haas, Clk. Bd. Trustees of the Sanitary District of Chicago, 1110 Security Bldg.

DES MOINES, IA.—Bids are asked until Feb. 14 for constructing a highway bridge across the Des Moines River at North Sixth Ave., in this city, including piers, abutments, retaining walls and superstructure, but not including earth approaches, and for the construction of two abutments for the bridge to be built over the Des Moines River at East Sixth St. G. A. Eberhart and C. E. Campbell, Bd. Pub. Wks.

SIOUX CITY, IA.—Plans for a new bridge over the Floyd River at the east end of Fourth St., to replace the present structure, are being prepared by the city engineer, according to reports; estimated cost, $8,000.

OSWEGO, KAN.—Bids are wanted by the county clerk until Feb. 6, according to reports, for constructing iron bridges over various creeks in Labette county.

WARRENSBURG, MO.—Bids are asked until Feb. 8 for constructing 25 span of bridges, of lengths varying from 80 to 20 ft. in length. The structures will be of steel I-beams, with iron substructure. Geo. T. Gallahar, Des. Engr., Rd. and Bridge Comr., Knobnoster. (This authentic information corrects a similar item in our issue of Jan. 11.)

COLORADO SPRINGS, COLO.—E. A. Sawyer, Cy. Engr., writes us in regard to the proposed Monument Creek bridge that an appropriation of $12,000 was made by the council last year, conditional on joint arrangement with county board and the Street Ry. Co., to raise the balance of $18,000 or $20,000. No arrangement has as yet been made, and no plans have been prepared.

HARLEM, MONT.—Bids are wanted by Luke C. Hays, U. S. Indian Agent, at Harlem, for constructing one Howe truss bridge over Milk River, at Fort Belknap Agency.

NEW WHATCOM, WASH.—Local papers report that the contract for rebuilding the recently washed out bridge over the Nooksach, at Everson, to be one span, 230 ft., has been awarded to the Pacific Bridge Co., Portland, Ore., at $5,185.

SPOKANE, WASH.—It is reported that Geo. S. Deeks & Co., St. Paul, Minn., has been awarded a contract from the Great Northern Ry. Line for constructing two steel bridges at this place, to cost about $150,000.

ALAMEDA, CAL.—Bids are asked until Feb. 10 for constructing a double draw-span bridge over tidal canal at Fruitvale Ave., near this place. Maj. W. H. Heuer, U. S. Engrs., Flood Bldg., San Francisco.

REDLANDS, CAL.—Bids are asked until Feb. 7 for the masonry work and excavating and backfilling for a bridge at Cypress Ave., between Reservoir and Cajon Sts. L. W. Clark, Cy. Clk.

VANCOUVER, B. C.—Bids are asked until Feb. 28 for constructing a bridge, wooden or steel, over the Thompson River at Kamloops, B. C. W. S. Gore, Deputy Comr. of Lands and Wks., Lands and Wks. Dept., Victoria, B. C.

WINNIPEG, MAN.—H. N. Ruttan, Cy. Engr., writes us that nothing definite has been done towards the construction of the proposed bridge.

SYDNEY, N. S. W.—Plans for a bridge over Sydney Harbor, to cost about $2,500,000, are wanted by the government of New South Wales until about Aug. 1, according to reports. The designer of the best plan will receive a prize of $5,000. Geo. W. Bell, U. S. Consul, Sydney; Colonial Agents, Westminster Chambers, 9 Victoria St., S. W., London; C. W. Darley, Engr. in Ch. P. W. D., Sydney.

BUILDINGS.

PORTLAND, ME.—The trustees of the Walker Estate have offered the city $20,000 for a manual training school.

WATERVILLE, ME.—It is stated that Dr. F. C. Thayer and W. T. Haines will build an opera house next season at Main and Appleton Sts.

CAMBRIDGE, MASS.—Harvard University will erect a boat house, to cost about $43,000, to replace the one recently burned.

BROOKLYN, N. Y.—Bids are asked by the Health Board, 55th St. and 6th Ave., N. Y., until Jan. 24, for constructing a pavilion at Kingston Ave. Hospital——Plans have been filed by W. G. Groves, Hollis, L. I., for seven 4-story brick flats at Washington Ave., near Douglass St., to cost about $70,000, and five at Washington Ave., near Degraw St., to cost about $50,000. B. Driesler, Arch., 1432 Flatbush Ave.; by the city of New York for a 3-story school building at Blake and Thatford Aves., to cost about $120,000. C. B. Snyder, Arch., 59th St. and Park Ave., N. Y.——Hyde & Behman will build a theatre at Graham Ave. and Debevoise St.——P. Sanford Ross, 277 Washington St., Jersey City, has the contract for the new freight depot at the foot of Clymer St., to cost about $500,000, for the D., L. & W. R. R. Co.

BUFFALO, N. Y.—Bids are asked until Jan. 22 for installing five engines, etc., in the Buffalo State Hospital. J. P. Dudley, Pres. Bd. Mgrs., 19 E. Swan St.——A 5-story brick apartment house, to cost about $60,000, will be erected on Johnson's Park by Wm. Larkin, Ellicott Square. John Carson, Arch.

BUFFALO, N. Y.—Bids are asked until March 5 for erecting keeper's dwelling, tower, etc., at entrance to Maumee Bay, O., as stated in our advertising columns. Maj. T. W. Symons, U. S. Engr.

JOHNSTOWN, N. Y.—Bids are asked by the county clerk, according to reports, until Feb. 14, for constructing the county alms house.

MINEOLA (L. I.), N. Y.—The commissioners have selected the plans of W. B. Tubby, 83 Fulton St., New York, for the new court house, to cost about $100,000.

NEW YORK, N. Y.—Bids are asked until Jan. 22 for alterations to the City Hospital, Blackwell's Island, and for installing a passenger elevator and two dumb-waiters in the Metropolitan Hospital, Blackwell's Island. J. W. Keller, Pres. Dept. Pub. Charities.——Bids are asked by the Fire Department, 157 E. 67th St., until Jan. 24, for erecting an engine house at 152d St. and Prospect Ave., Bronx.——Plans have been filed by the Edison Electric Illuminating Co., 55 Duane St., for a 3-story stone power house at 1st Ave. and 38th St., to cost about $809,000; by Le G. K. Pettit, 556 Halsey St., Brooklyn, for a 7-story brick flat at 111th St., near Manhattan Ave., to cost about $45,000. Cutler & Benedict, Archs., 489 5th Ave.; by Kate C. Brown, 60 Liberty St., for a 7-story brick flat at 71st St., near West End Ave., to cost about $165,000. W. H. Boylan, Arch., 60 Liberty St.

NEW YORK, N. Y.—Frank Marion Wright, Arch., 149 Broadway, writes us that he has prepared plans for a 2-story brick factory building, 23 × 96 ft., at 211 W. 50th St., for G. G. Wendel, 121 E. 83d St. M. J. Sullivan, Agent, Seymour Bldg., 5th Ave. and 42d St., will receive bids.——It is stated that the Erie R. R. will erect an office building to cost about $1,500,000 at West and Duane Sts.

NEW YORK, N. Y.—Plans have been filed by Hugh Hoeffler for a 7-story brick flat, 101 × 95 ft., at 118th St. and Amsterdam Ave., to cost about $250,000. Neville & Bagge, Archs., 217 W 125th St.

WEST POINT, N. Y.—Bids are asked by the Quartermaster, U. S. M. A., until Feb. 13, for erecting officers' quarters.

JERSEY CITY, N. J.—G. B. Post, 33 E. 17th St., New York, has prepared plans for an 8-story office building for the Commercial Trust Co.

NEWARK, N. J.—The question of building a new high school building is being discussed.

VERONA, N. J.—The board of trustees of the Newark City Home, which was recently burned, will build new buildings to cost about $100,000.

ALLEGHENY, PA.—The Standard Ice Co. will erect a factory on River Ave. to cost about $350,000. F. Torrence, Pres.; W. C. Hagan, Secy.

PHILADELPHIA, PA.—The council will appropriate $40,000 for altering the Export Exposition auditorium for the national republican convention, according to reports.

PHILADELPHIA, PA.—Hewitt Bros., Bullitt Bldg., have prepared plans for a new ward building at Front St. and Lehigh Ave., for the Episcopal Hospital, to cost about $200,000.——Thos. O. Twibill, Betz Bldg., will erect an 8-story apartment house, to cost about $150,000.

ALTOONA, PA.—Bids are asked until Feb. 1 for erecting two fire houses, as stated in our advertising columns. Plans and specifications on file at the office of Engineering News Publishing Co., 220 Broadway, New York. G. A. Ickes, Chn. Council Com.

JOHNSTOWN, PA.—It is stated that this city will erect a new city hall, to cost about $50,000.

NORRISTOWN, PA.—A bill is before the legislature providing money for erecting a city building.

PITTSBURG, PA.—The Pennsylvania R. R. has plans for a passenger station to cost about $1,500,000.

READING, PA.—The board has approved plans for five new school buildings, to cost about $65,000.

YORK, PA.—Frank Geise, Mayor, writes us that the question of issuing $60,000 in bonds for a city hall will be voted upon Feb. 20.

BALTIMORE, MD.—The contract for the bank building of the German Savings Bank, to cost about $60,000, has been let to H. S. Rippel, according to reports. Baldwin & Pennington, Archs., 44 South St.

WASHINGTON, D. C.—The Daughters of the American Revolution are considering the construction of a memorial building.

NORFOLK, VA.—Bids are asked until Feb. 10 for electric wiring in the U. S. Building. Jas. K. Taylor, Supv. Arch., Washington.

NORFOLK, VA.—The following bids were received by the Bureau of Yards and Docks, Navy Department, Jan. 6, for erecting an electric light plant and plumbing shop building at the Navy Yard. (1) being for work complete; (2) for two coats hard finish plaster under concrete floor and roof; (3) for covering expanded webs, etc., with metal and plaster; (4) for substituting concrete and plaster for metal and plaster in item 3; (5) price deducted from item 1 for omitting crane and elevator; (6) price deducted from item 1 for omiting work required in paragraph 42 of the specifications; (7) same as item 1, government to furnish granite. M. T. Endicott, Ch. Bureau Yards & Docks:

Bids Received at Washington, D. C., Jan. 6, 1900, for an Electric Light Plant, Etc., at the Norfolk Navy Yard.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
L. L. Leach & Sons, 1402 Marquette Bldg., Chicago	$71,671*	$1,000	$700	$700	$1,600	$9,000	$70,200
Holtzclaw Bros., Hampton, Va.	82,359	410	1,300	1,200	3,182	8,082	79,927
L. P. Hazen & Co., Cincinnati, O.	89,891	1,456	1,113	1,700	3,380	10,000	88,591
Penn Bridge Co., Beaver Falls, Pa.	74,380	1,000	1,400	1,500	1,700	7,500	72,380
Snarl & Triest, 39 Cortlandt St., New York	74,426	1,700	1,400	1,650	3,000	4,000	73,426
McIlvaine, Unkefer & Co., 2d Nat. Bank, Pittsburg	89,990	600	820	1,176	7,990	5,300	87,290
Meads & Reynolds, Washington, D. C.	83,193	....	....	....	4,140	6,265	81,393
Grant Wilkins, Atlanta, Ga.	83,150	835	1,444	1,750	5,950	8,460	82,180
Structural Iron Co., Baltimore, Md.	85,800	900	1,500	2,000	4,000	7,500	84,400

*Awarded contract.

COLUMBIA, S. C.—The following bids were received Jan. 5 for erecting a new city hall and opera house building: W. J. May, Columbia, $38,561; Nicholas Ittner, 240 Jackson St., Atlanta, Ga., $42,872; Lynch & Carter, Spartanburg, S. C., $44,334; G. W. Warring & Co., Wright's Hotel, Columbia, $44,365; H. M. Johnson, Charlotte, N. C., $45,082; Stewart Contracting Co., Columbia, $48,000; J. Milady, Columbia, $48,400; D. Getaz & Co., Knoxville, Tenn., $55,000.

BLUE RIDGE, GA.—Bids are asked until March 1 for erecting the county court house. T. J. Wilson, Ordinary.

LA GRANGE, GA.—It is stated that the Macon & Birmingham Ry. will remodel its passenger depot.

MONTGOMERY, ALA.—The following contracts have been received for erecting a new school house: F. P. Heffner, 7 Electric Bldg., Atlanta, plan (1), $23,933; plan (2) $22,933 (accepted); W. A. Andrews, Opelika, Ala., plan (1), $21,900; (2) $25,000.

JACKSONVILLE, FLA.—Plans are being prepared for 3-story brick police headquarters building; also for a new warehouse for the Plant System, to replace the one recently burned.

NEW ORLEANS, LA.—Bids are asked until Jan. 22 for erecting a jail. W. S. Douglas, Compt.

CLEVELAND, O.—The Little Consolidated Street Ry. Co. will build a car house to cost about $40,000.

COLUMBUS, O.—Bids are asked until Jan. 23 for erecting a dwelling for the Emerson McMillan Observatory. Alexis Cope, Secy.

LIMA, O.—The council is reported to be discussing the question of erecting a high school building, to cost about $100,000.

OBERLIN, O.—Oberlin College has received $60,000 for a new chemical laboratory building.

CHICAGO, ILL.—The directors of the Bohemian St. Procoplus College have decided to erect a college building next spring.

CHICAGO, ILL.—Nimmons & Fellows, Marquette Bldg., have prepared plans for a 2-story warehouse on Kingsbury St., for the Ogdensburg Traction Co., to cost about $40,000.

BELOIT, WIS.—President Eaton has plans for enlarging Beloit College and will try to raise $1,000,000 for that purpose.

HUDSON, WIS.—The plans of W. T. Towner, 103 Germania Life Bldg., St. Paul, Minn., for a 2-story brick court house, to cost about $40,000.

MADISON, WIS.—Bids are asked until Jan. 31 for erecting a building for the Engineering College of the University of Wisconsin. E. F. Riley, Secy.

MILWAUKEE, WIS.—Plans have been prepared by Ferry & Clas, 419 Broadway, for a flat house at Biddle and Jefferson Sts., to cost about $65,000, for John Dahlman.

OTTUMWA, IA.—It is stated that Andrew Carnegie will give $50,000 for a public library building.

DULUTH, MINN.—W. M. Hubbard, Chn. Bldg. Com., will receive plans for a new stone library building to cost about $50,000.

DULUTH, MINN.—The Pioneer Steel Elevator Co. will build a grain elevator; capacity, $500,000 bushels. G. F. Piper and W. S. Archer are interested.

ST. PAUL, MINN.—It is stated that the United Lutheran Church will erect a 3-story college building at Hamline, to cost about $75,000.

FREMONT, NEB.—Bids are asked until Feb. 6 for erecting a high school building. Mrs. M. E. Reynolds, Secy.

PLATTSMOUTH, NEB.—Reports state that C. C. Parmelee will erect an opera house to cost about $80,000.

GALENA, KAN.—The council has voted to erect a court house to cost about $100,000.

CHILLICOTHE, MO.—Andrew Carnegie is reported to have donated $25,000 for public library building.

KANSAS CITY, MO.—Plans have been prepared for a 5-story brick office building to cost about $100,000 for the Cable City Land Co. A. A. Tomlinson, Pres.

ST. LOUIS, MO.—It is stated that the following buildings will be erected this year: St. Louis Trust Co. building, Fourth and Locust Sts., to cost about $175,000; alterations and additions to the Mississippi Valley Trust Co. building, Fourth and Pine, to cost $75,000; Byron Nugent building, Washington Ave., to cost $75,000; Nathan Cole building, 8th St. and Lucas Ave., to cost $150,000; the new hotel of the Nelson Bldg. Co., 6th St. and Franklin Ave., to cost about $75,000.

LARAMIE, WYO.—The legislature has appropriated $35,000 for a new hall of science for the University.

LOS ANGELES, CAL.—The Los Angeles & Pacific R. R. will erect a new depot to cost about $40,000.

LOS ANGELES, CAL.—Bids are asked until Jan. 22 for erecting an engine house. C. H. Hance, Cy. Clk.

SANTA ANA, CAL.—The trustees have decided to hold an election to vote on the question of issuing $30,000 in bonds for a new school house.

SAN DIEGO, CAL.—Bids are asked until Feb. 10 for erecting the east wing of the state normal school. W. R. Guy, Pres. Bd. Trustees.

VALLEJO, CAL.—Bids are asked until Feb. 17 for erecting a machine shop at the Mare Island Navy Yard. M. T. Endicott, Ch. Bureau Yards and Docks, Washington.

CHELMSFORD, ENG.—Plans are wanted until March 31 for a police station; first prize, $500; second, $250; third, $125. H. W. Gibson, Shire Hall, Chelmsford.

WATER-WORKS.

BATH, ME.—Bids are asked by the Maine Water Co. until Feb. 10 for furnishing and laying about 2,700 ft. of 16-in. cast-iron water pipe, as described in our advertising columns. Address the company, at 493 Commercial St., Portland, Me.

CLAREMONT, N. H.—Jas. L. Rice, Supt., writes us that it is expected to get a new water supply from driven wells. No plans have yet been prepared, and test wells will not be driven until spring. The work will be done by the company, and paid for by bonds issued some time ago. Population, 5,000. F. F. Forbes, Engr., Brookline, Mass.

CHATHAM, CONN.—The Pocotopoque Water River Co. has been incorporated with a capital of $10,000.

NORWICH, CONN.—The water board is making tests for sinking 15 wells for an increased water supply.

BOSTON, MASS.—Bids are asked until noon Jan. 24 for furnishing 3,000 tons of cast-iron water pipe; bond, $20,000. A. P. Martin, Water Comr.

ADAMS, N. Y.—This place on Jan. 4 voted against purchasing the works and then spending about $6,000 for improving them.

ELMIRA, N. Y.—The legislature has been asked to grant this city authority to own its works, either by purchase from the Elmira Water Works Co., for a sum not to exceed $800,000, or by construction.

LANSINGBURG, N. Y.—A bill is before the legislature authorizing this city to borrow $20,000 for an additional reservoir, etc. C. E. Hicks, Engr.

LEBANON SPRINGS, N. Y.—A company is being organized by Chas. Haines, of Kinderhook, N. Y., and New York city, to construct a conduit from Lebanon Springs to Albany, about 24 miles, to convey water for bottling.

SALEM, N. Y.—The question of erecting a windmill, etc., for improving the water supply, is being considered. Address Supervisors Snyder and Edie.

SYRACUSE, N. Y.—John Venner, Acting Supt. Water Bureau, is preparing plans for extending the mains to Elmwood.

JERSEY CITY, N. J.—Mayor Hoos has vetoed the ordinance to purchase works with a supply of 70,000,000 gallons at a cost of $8,745,000, instead of one for 50,000,000 gallons for $7,595,000. An election will be held Feb. 28 to decide the question. Patrick H. Flynn, Montague St., Brooklyn, N. Y., is the contractor for the work.

KEARNEY, N. J.—The Bergen County Water Co. has been incorporated with a capital stock of $50,000, by J. W. Griffin and H. C. Pierce, of Arlington, N. J., and D. Dunn, of Kearney.

PERTH AMBOY, N. J.—Bids are asked until Feb. 5 for 255 lengths of 8-in. water pipe, eight 8 × 6-in. tees, an 8 × 6-in. cross, a 6-in. gate valve, ten 6-in. plugs, etc. J. G. Burns, Supt.

EASTON, PA.—R. P. Rader, Supt., writes us that J. Marshall Young, Engr., has charge of plans for improving the works for the Lehigh Water Co.

NORTH BRADDOCK, PA.—The question of a better water supply for fire protection is being considered.

WILMINGTON, DEL.—The Glen Spring Water Co. has been incorporated with a capital stock of $30,000 by J. J. Wood, of Philadelphia, and J. A. Wood, of Wilmington.

WOODSTOCK, VA.—J. H. Radeffer, Mayor, writes us that it is not likely that the proposed works will be built very soon. The water will be secured from a spring. Population, 1,400.

ATLANTA, GA.—The water board has asked for an increase in the appropriation of $22,500 over that of 1899. This increase is for the following: A new battery of boilers, $7,500; to replace meters, $5,000; a trestle and coal shed at No. 2, $2,500; a coal shed at No. 1, $1,200; an engine to run dynamo at No. 1, $500; fence around the reservoir, $1,800; improvements to shop and foundry, $4,000. This is in addition to $25,000 for new mains and $89,000 for ordinary expenses.

STARKVILLE, MISS.—Bids are asked until Feb. 19 for furnishing the materials for the proposed works, as described in our advertising columns. The town will do its own construction. Hall & George, Engrs.; F. L. Wier, Mayor.

AKRON, O.—The Akron Water Works Co. proposes to build extensions to mains to different parts of the city, and to increase the pumping capacity by the purchase of a 10,000,000-gallon pump.

COLLINWOOD, O.—The council, it is stated, will ask for bids at once for pumping and constructing works to cost $60,000, and an electric plant to cost $18,000.

INDIANAPOLIS, IND.—The Indianapolis Water Co., local papers state, is planning to build 42 acres of sand filter-beds, and to utilize the canal and White River for a supply, including a 6-ft. main from Broadcut to the filter; estimated cost, about $200,000. A. W. Davis, Vice-Pres.

EAST LIVERPOOL, O.—Work on the proposed south side works for the South Side Land Co. will begin early in the spring. C. A. Smith, Pres.

LIMA, O.—Bids are asked until Feb. 12 for the purchase of $150,000 of 3½% water-works bonds. C. E. Lynch, Cy. Clk.

PIQUA, O.—The citizens' committee has submitted its report for new works for a city of 25,000 population. Henry Flesh, Chn.

CAYUGA, IND.—The question of putting in works and an electric plant for this place at a cost of $20,000 is being considered by M. O. Bish, of the Knox Construction Co., Knox.

LINTON, IND.—The Chicago Construction Co. and the Linton Electric Light & Power Co., Chicago, Ill., have submitted propositions to put in works to cost about $50,000.

SUTTONS BAY, MICH.—It is stated that this place will build works and an electric plant in the spring.

TWO RIVERS, WIS.—Plans for works and an electric plant prepared by C. F. Loweth, 94 E. 4th St., St. Paul, Minn., have been approved, and, it is stated, that an election will be held April 13 to vote for bonds for the improvements; estimated cost, $50,000.

ADA, MINN.—Bids are asked until March 1 for furnishing the materials and for constructing works and an electric plant, as described in our advertising columns. Geo. A. Ralph, Engr., Crookston, Minn.; F. M. Calkins, Village Recdr.

ST. PAUL, MINN.—Bids are asked until Jan. 31 for furnishing 600 ⅝-in., 12 ¾-in., 12 1-in., six 1½-in. and six 2-in. water meters, in lots of 25. John Caulfield, Secy. Bd. Water Comrs.

DICKINSON, S. DAK.—It is stated that arrangements for works is being made.

HUDSON, S. DAK.—T. R. Rosier, of Fairview, S. Dak., is reported to have secured the contract for building works.

CALDWELL, KAN.—The question of issuing $25,000 in bonds for works and an electric plant will probably soon be voted upon, according to reports.

ST. LOUIS, MO.—The board of public improvements has voted to purchase and lay pipe, valves, fire-plugs, etc., in certain streets at a cost of about $530,000. Edward Flad, Water Comr.; R. E. McMath, Pres.

CLARKSVILLE, TEX.—It is proposed to build works, according to reports.

SAN ANTONIO, TEX.—The water company has offered to sell its works, franchise, etc., to the city at the end of 25 years. Address Alderman W. L. Barker.

WILLS POINT, TEX.—This place voted Jan. 9th to issue $15,000 in bonds for works, according to reports.

DENVER, COLO.—The aldermen have adopted the ordinance providing for the issue of $4,700,000 in bonds for municipal works.

BAKER CITY, ORE.—An election will be held Jan. 27 to vote on the question of issuing $100,000 in bonds for new gravity works. There will be about nine miles of pipe.

FRESNO, CAL.—The San Joaquin Electric Co., it is stated, will begin the construction of a reservoir, etc., at once, to cost about $30,000.

PASADENA, CAL.—W. B. Clapp, Cy. Engr., writes us that the city is taking steps to acquire the present works. Progress is slow, as the company has put an exorbitant value on the works, which will probably necessitate condemnation proceedings. Population, 12,000.

SANTA ANA, CAL.—City Engineer Kellogg has been instructed to prepare plans and specifications for extending the water mains.

WHITTIER, CAL.—An election will be held Jan. 23 to vote on the question of issuing $5,000 in bonds for new mains. W. E. Butler, Cy. Clk.

PHOENIX, ARIZ.—L. H. Goodrich, of the committee, writes us that an election will be held Feb. 23 to vote on the question of issuing $270,000 for city works.——The Arizona Water Co. is reported as making arrangements to build works to furnish electricity to this place, Tempe, etc. About 22 miles of pipe will be needed. Geo. V. Sturtevant, Jr., Chicago; C. L. Mailloux, 150 Nassau St., Elec. Engr., New York, are reported as the engineers.

EUREKA, UTAH.—I. H. Spriggs, Mayor, has appointed a committee to investigate the question of works.

LUNENBURG, N. S., CAN.—The Lunenburg Water Works Co. has asked for permission to put in new mains, hydrants, etc., according to reports.

ARNPRIOR, ONT.—This place has voted for works and a sewerage system, according to reports.

PORT HOPE, ONT.—This place will apply for permission to extend the works, according to reports.

SMITH'S FALLS, ONT.—Willis Chipman, 103 Bay St., Toronto, Ont., is reported as preparing plans for a second section of the proposed works and sewerage system. Bids will probably soon be asked. The improvements to the works will cost about $40,000, and the cost for the sewers about $75,000. B. E. Sparham, Town Clk.; Alex. Farrell, Mayor.

TODMORDEN, ENG.—Bids are asked until Feb. 12 for constructing the Gorpley reservoir, together with discharge tunnel, filter beds, water tank, 1½ miles of 15-in. pipe, etc. G. F. Deacon, Engr., 16 Great George St., Westminster, London; D. Sutcliffe, Town Clk.

GABLONZ, AUSTRIA.—The city council will soon call for bids for constructing works to supply 50 litres of water per head; population, 30,000; estimated cost, 486,000 gulden.

SEWERAGE.

PITTSFIELD, MASS.—W. S. Russell, Mayor, writes us that a committee has been appointed to prepare a plan for sewage disposal; no sewer or paving contracts in view.

WAKEFIELD, MASS.—The question of issuing $175,000 in bonds for connecting the system with Boston's is being discussed.

BATAVIA, N. Y.—Jos. W. Holmes writes us that the question of building a system has been referred to a committee, which is having plans drawn.

NEW YORK, N. Y.—Bids are asked by the Department of Sewers, 21 Park Row, until Jan. 24, for constructing two sewers in the Bronx, for rebuilding and improving the outlet of the Broadway sewer from Vernon Ave., to the East River, in Queens; and for furnishing a supply of water to 13 flush tanks in the First Ward and 22 in the Third Ward in Richmond.

WATERFORD, N. Y.—The Mayor has appointed a committee to confer with the board of health regarding the construction of an additional system.

CRANFORD, N. J.—The question of laying a sewer to Garford is being discussed.

RIDGEFIELD PARK, N. J.—The State Sewerage Commission has approved plans for a combined system for this town and Overpeck, to cost about $50,000.

SEA ISLE CITY, N. J.—It is stated that this town will build a system before summer.

ALLEGHENY, PA.—The council has decided to re-advertise for bids for a number of sewers; bids were received but were rejected as being too high.

LEBANON, PA.—The council is discussing the question of building a system. G. B. Schock, Pres.; C. G. Gerhart, Mayor.

MEDIA, PA.—This town will, it is said, build a system shortly.

OIL CITY, PA.—G. F. Roess, Cy. Engr., writes us that bids will probably be opened Feb. 12 for about 1,500 ft. 12-in. pipe sewer, average cut 7 ft., to cost $7,000; 900 ft. 15-in. pipe sewer, average cut 12 ft, cost about $900; about 720 ft. of 18-in pipe sewer, average cut 7 ft., some rock, to cost about $1,000, and also for other sewer improvements.

YORK, PA.—Frank Geise, Mayor, writes us that the people will vote Feb. 20 on the question of issuing $275,000 in bonds for sewers, $7,000 for a garbage crematory, etc.

SALISBURY, N. C.—S. F. Lord, Mayor, writes us that the following bids were received Jan. 9 for furnishing pipe and constructing about 10 miles of 18 to 8 in. pipe sewers: W. O. Burton, $26,795; John Jacoby, Washington, D. C., $23,906; E. A. Wilson, Salisbury, N. C., $16,889; Guild & Co., Chattanooga, Tenn., $17,794; Geo. O. Turney, Spartanburg, S. C., $18,157; Eggle & Co., Boston, $24,251; Balfour Quarry Co., Balfour, N. C., $22,868; D. M. Roper, $17,973; Coon & Donnohoe, $20,962; Burkholtes & Co., Birmingham, Ala., $15,040 (accepted); Wagner Water Supply Co., Dayton, O., $26,651; J. P. Thompson & Co., $22,561; Indiana Con. Co., $19,972; Myers & Gusser, Richmond, Va., $40,321; Maynard & Ford, $21,784; O. S. Gallimore, Salisbury, N. C., $22,658; Irwin & Bro., Greenville, O., $18,252; Elkin & Brown, Salisbury, N. C., $22,193; Montague & Co., Chattanooga, Tenn., was awarded the contract for furnishing the pipe.

NEWBERRY, S. C.—O. B. Mayer, Mayor, writes us that this city will probably put in a system this year. P. J. Von, Engr.

WASHINGTON, GA.—It is stated that E. K. O'Brien will prepare plans for a system.

BROOKHAVEN, MISS.—J. B. Daughty, Mayor, writes us that no steps have been taken as yet regarding the establishment of a system.

HATTIESBURG, LA.—The council is discussing the question of calling an election to vote on the issue of bonds for a system.

DAYTON, O.—A system will be constructed in the 9th district. F. M. Turner, Cy. Engr.; R. H. Ferguson, Compt.

LAKEWOOD, O.—R. J. Wood, Borough Engr., writes us that the question of building a system will be voted on in February; estimated cost, $150,000.

LIMA, O.—Bids are asked until Feb. 12 for the purchase of $50,000 of 4% sewer and $10,000 of fire department bonds. C. E. Lynch, Cy. Clk.

WELLSVILLE, O.—The council will consult with H. E. Riggs, 613 The Nasby, Toledo, regarding plans for a system.

FORT WAYNE, IND.—Bids are asked until Feb. 19 for constructing 15,940 ft. of brick sewer, as described in our advertising columns; also, until Jan. 18 for constructing pipe sewers in several streets. A. M. Schmidt, Clk. Bd. Pub. Wks.

CHICAGO, ILL.—The question of building several sewers to cost $350,000 is being discussed.

MARSHALLTOWN, IA.—Mayor F. G. Pierce writes us that the city is taking steps to provide a disposal plant, to take care of glucose factory and city sewage.

MINNEAPOLIS, MINN.—A sewer will probably be built to the sugar factory at St. Louis Park.

KANSAS CITY, MO.—H. A. Wise, Cy. Engr., is preparing plans for about six miles of sewers.

GRAND JUNCTION, COLO.—Hiram Phillips, St. Louis, has been employed to prepare plans for a sanitary system for the Grand Junction Indian Training School, near Grand Junction.

PUEBLO, COLO.—The city engineer has been directed to advertise for bids for laying laterals in Bessemer.

EVERETT, WASH.—E. C. Rea, Cy. Clk., writes us that the city will build about 10½ miles of 18 to 6-in pipe sewers, average cut 6 ft., to cost $57,793. G. N. Miller, Engr., Box 424, Seattle.

OAKLAND, CAL.—City Engineer Clement is preparing plans for a system in the annexed district.

PHOENIX, ARIZ.—L. H. Goodrich writes us that an election will be held Feb. 23, to vote on the question of issuing $125,000 in bonds for a system.

COLLINGWOOD, ONT.—John Hogg, Town Clerk, writes us that plans for a system have been prepared by Galt & Speckman, Toronto, but have not been approved.

SMITH'S FALLS, ONT.—Willis Chipman, 103 Bay St., Toronto,, is reported to be preparing plans for another section of the sewer and water works system; bids will be asked in the spring.

FREDERICTON, N. B.—A. G. Beckwith, Cy. Engr., writes us that the city has appointed a committee to look into the question of a system. W. E. Smith, Chn. Com.

GARBAGE DISPOSAL—STREET CLEANING

MANCHESTER, N. H.—W. C. Clarke, Mayor, is opposed to building a garbage disposal plant for a couple of years.

NEW HAVEN, CONN.—The Clerk of the Board of Health writes us that the following bids were received Dec. 26 for removing garbage for one year from Feb. 1, 1900, Western District: Farnham & Lawrence, $4,760; A. W. Forbes, 37 Forbes Ave., $4,250 (accepted). Eastern District: R. D. Daley, $1,225 (accepted); Andrew Halloran, $1,100 (bid withdrawn).

ITHACA, N. Y.—The question of garbage disposal has been referred to a committee, of which Alderman R. H. Thurston is a member.

CAMDEN, N. J.—Lewis Mohrman, Street Comr., is considering the construction of a crematory.

ALTOONA, PA.—The question of building a crematory is being discussed.

YORK, PA.—Frank Geise, Mayor, writes us that the question of issuing $7,000 in bonds for enlarging the garbage crematory will be voted upon Feb. 20.

HAGERSTOWN, MD.—The council is discussing the question of building a crematory.

WASHINGTON, D. C.—The District Commissioners have asked for $40,000 for removing waste and ashes.

LOUISVILLE, KY.—It is stated that Mayor Weaver has selected the sites for the two new crematories, to cost about $43,800.

HAMILTON, O.—The council has taken steps toward the erection of a crematory.

MASSILLON, O.—An ordinance has been introduced in the council providing for the erection of a garbage disposal plant.

ST. PAUL, MINN.—O. Claussen, Cy. Engr., has prepared plans for the removal of garbage and street cleaning, and will submit them to the committee. Alderman Knauft, Member Com.

WINNIPEG, MAN.—H. N. Ruttan, Cy. Engr., writes us that nothing has yet been done regarding a plant.

STREETS AND ROADS.

WOBURN, MASS.—The question of issuing $300,000 in bonds for street improvements is being discussed.

BROOKLYN, N. Y.—The board of public improvements has decided to lay out Newkirk Ave. from Flatbush Ave. to Brooklyn Ave. J. H. Mooney, Secy.——The question of extending Bedford Ave., from Montgomery St. to Flatbush Ave., is being discussed.

BUFFALO, N. Y.—R. G. Parsons, Secy. Bd. Pub. Wks., writes us that the following bids were received Jan. 10 for repaving Ellicott St.: G. W. Patridge, brick, $2,850; H. P. Burgord, Mooney Bldg., brick, $3,150; asphalt, $3,029; German Rock Asphalt & Construction Co., Morgan Bldg., asphalt, $2,987; Barber Asphalt Paving Co., Ellicott Sq. Bldg., asphalt, $2,975; American Contracting Co., Ellicott Bldg., asphalt, $2,885.

MIDDLETOWN, N. Y.—The question of extending Centre St. is being discussed.

NEW YORK, N. Y.—Bids are asked by the Department of Highways, 15 Park Row, until Jan. 23, for improving one street in Manhattan and five in Bronx.

JERSEY CITY, N. J.—The North Hudson portion of the Boulevard will be improved this spring; $110,000 has been appropriated.

MOUNT HOLLY, N. J.—Bids are asked until Feb. 6 for constructing three 8-inch macadam roads 10 ft. wide, as stated in our advertising columns. Howard Mathias, Dir.

OIL CITY, PA.—G. F. Roess, Cy. Engr., writes us that 10,585 sq. yds. of brick paving, to cost about $24,000, is contemplated. Part of Seneca St. and Harriet Ave. will be paved, and Plummer St. will have about 10,000 sq. yds. of brick pavement; bids will be asked in about two months.

WILLIAMSPORT, PA.—It is stated that Mayor Williams is in favor of paving two streets, to cost about $35,000.

BALTIMORE, MD.—The council has decided to pave St. Paul St., from 25th to 30th St., with asphalt.

DANVILLE, VA.—The Mayor writes us that the contract for paving Main St. with block, about 20,000 sq. yds., has been let to W. D. Dodge, of Buffalo, N. Y.

CHARLESTON, W. VA.—The commissioners will submit the question of issuing bonds for road improvements to the people.

COLUMBIA, S. C.—The council has been petitioned to pave Gervais St., from Main St. to the union depot.

ATLANTA, GA.—Walter Taylor, Secy to the Mayor, writes us that the proposed paving of Peters St. is only talked of.

NEW ORLEANS, LA.—The board has authorized the paving of five streets.

CANTON, O.—The City Engineer is preparing plans for paving several streets and for a system of sewers.

CINCINNATI, O.—Bids are asked until Feb. 7 for improving Delta Ave. S. Nieman, Pres. Bd. Cy. Affairs; G. H. Spellmire, Clk.

CLEVELAND, O.—The board has authorized the Director of Public Works to advertise for bids for improving of portions of 20 streets.

CLEVELAND, O.—Bids are asked until Feb. 6 for paving three streets with brick. John Vandevelde, Dir.

EAST CHICAGO, IND.—Bids are asked until Jan. 29 for improving Chicago and Tod Aves., about 18,472 sq. yds. macadam, and 6,486 ft. concrete curb. H. E. Jones, Cy. Clk.

INDIANAPOLIS, IND.—The question of street improvements for this year is being discussed.

PENDLETON, IND.—The contract for paving the main street has been let to O. Hardin.

JACKSONVILLE, ILL.—C. W. Brown, Public Engr., writes us that bids will be received about Feb. 10 to 15 for 20,000 sq. yds. of brick paving, to cost about $33,000. It is proposed to pave about 3,200 sq. yds. of asphalt, to cost $6,500.

MARSHALLTOWN, IA.—F. G. Pierce, Mayor, writes us that the contract for about 500,000 sq. ft. cement walk will be let in about a month.

ST. PAUL, MINN.—Bids are asked until Jan. 22 for paving Waconta St., about 2,193 sq. yds. brick and 5,208 sq. yds. sandstone. C. H. Bronson, Clk. Bd. Pub. Wks.

OMAHA, NEB.—Andrew Rosewater, Cy. Engr., writes us that Vinton St., between 20th and 24th St., about 5,000 sq. yds., will be paved with stone, largely by private subscriptions, to cost about $10,000.

INDEPENDENCE, MO.—The board is discussing the question of considerable paving for this year.

FORT WORTH, TEX.—The contract for paving the Al Hayne triangle with brick, about 6,000 sq. yds., has been let to Brown & Dabney, Canton St., and G. C. & S. F. Ry., Dallas, at about $10,500.

GALVESTON, TEX.—G. Q. McCracken, Cy. Clk., writes us that an election was to be held Jan. 16 to vote on the question of issuing $9,000 in bonds for street improvements.

DENVER, COLO.—Bids are asked until Feb. 2 for the purchase of $24,500 in bonds for street improvements. H. V. Johnson, Mayor; J. W. Shackelford, Pres. Bd. Pub. Wks.

MISSOULA, MONT.—Bids are asked until Feb. 5 for building a road around the De Long Rranch. A. P. Tietjen, Chn. Bd. Comrs., Higgins Ave.

SEATTLE, WASH.—Bids are asked until Jan. 29 for improving Queen Ave. Driveway. C. B. Bradley, Secy. Bd.

SPOKANE, WASH.—L. F. Boyd, Cy. Clk., writes us that the city will pave several streets in the spring. Contracts for most of the work have been let to the Alcatraz Paving Co.

LOS ANGELES, CAL.—F. H. Olmstead, Cy. Engr., writes us that he has no new plans for paving or sewers.

OAKLAND, CAL.—H. D. Rowe, Pres. Cy. Council, writes us that the city has done nothing further than to direct the City Engineer to prepare plans for paving.

WINNIPEG, MAN.—Bids are asked until Feb. 7 for supplying about 1,000 cords cedar paving blocks. C. J. Brown, Cy. Clk.

MANUFACTURING PLANTS.

GARDINER, ME.—The American Ice Co. is said to be negotiating for the establishment of ice plants in Atlanta, Memphis, Montgomery, Birmingham, Chattanooga and Nashville.

AUBURN, N. Y.—The Auburn Electric Light, Heat & Power Co. is reported to have purchased property on which it proposes to build an addition to its plant.

CRANFORD, N. J.—It is reported that the contract between the municipal authorities and the company which proposes to erect an organ factory has been made. Plans

for the erection of 100 new houses in Garwood, to accommodate part of the employees, of which there will be 500, are now being prepared.

PITTSBURG, PA.—The contracts for the construction of the Braddock Machine & Mfg. Co. are reported to have been let. The power will be generated by gas engines and all machinery will be operated by electricity.

READING, PA.—The Holde & Hoist Hosiery Co., it is said, has awarded the contract for erecting a plant to replace the factory recently burned; 600 hands will be employed.

WILMINGTON, DEL.—Fire destroyed the works of the Delaware Hard Fiber Co. on Jan. 10, according to reports; reported loss, about $125,000.

GASTONIA, N. C.—Plans for a cotton mill at this place, to cost about $1,000,000, are reported as being prepared. Work will begin as soon as the weather permits.

CHARLESTON, S. C.—J. N. Martrausf, 15 Broad St., writes us that the Citizens' Ice Co., in which he is interested, is now receiving proposals for the construction of buildings for its plant.

WESTMINSTER, S. C.—The Southern Bobbin & Spindle Co. is reported to have increased its capital from $5,000 to $35,000 for the purpose of enlarging its plant.

STATESBORO, GA.—D. R. Groover writes us that nothing will be done towards constructing the proposed cotton mill until the company is organized.

BESSEMER, ALA.—It is announced that the American Foundry Co. proposes to dismantle the two leading plants at Hammond, Ind., and remove them to Bessemer.

HUNTSVILLE, ALA.—A company has been organized, according to reports, with S. B. Stewart, Mgr. of the Southern Express Co., as president, to build and operate an ice factory. The plant will be built this spring.

CHATTANOOGA, TENN.—Local papers state that the Chattanooga Steel Roofing Co. proposes to build a new factory. J. E. Annis, Pres.

LOUISVILLE, KY.—The Harry Neissinger Tobacco Co. is preparing to make additions and improvements to its tobacco plant at Floyd and Caldwell Sts. The plans for an addition of 50 × 150 ft. are being prepared by Kenneth McDonald, Arch. The new plant will have a capacity of 50,000 lbs. of output a day, according to reports.

WINCHESTER, KY.—W. P. Hackett, Supt., Purchasing Agent and Des. Engr., writes us that the Martin Construction Co., Winchester, will probably build an ice plant with 25 tons capacity a day and a power plant, if needed. The equipment for a plant at this place with a capacity of 60 arc lights of 1,200-c. p., and 1,300 incandescent lamps of 16-c. p. has been purchased.

TOLEDO, O.—The International Canning Co., Clarence Armstrong, Pres., is reported to have asquired a site on which it will erect its plant, which will consist of five factories. Contracts for machinery have been let.

ST. PAUL, MINN.—Reports state that James J. Hill, Pres. Great Northern R. R., proposes to erect a steel plant at Great Falls, Mont., for the construction of steel rails, bridge steel, and other articles necessary in railroad construction.

ROCKDALE, TEX.—The organization of a company, with J. S. Perry, Pres., to erect a cotton mill at this place, is reported. Half of the capital stock has been subscribed.

PUEBLO, COLO.—A company has been formed, according to reports, to erect a 30,000-barrel distillery, to cost about $250,000. A. P. Westerman, Peoria, Ill., is interested.——It is announced that work will soon be started on a new blast furnace for the Colorado Fuel & Iron Co., to be 95 ft. high and 21 ft. in diameter, and to cost about $500,000.

FRESNO, CAL.—Bids are asked until Jan. 22 for the erection of a brewery for the Fresno Brewing Co. E. Billert may be addressed.

SAULT STE. MARIE, ONT.—Reports state that the Ontario & Lake Superior Co., a new organization, which has a capital of $20,000,000, of which $6,000,000 has been paid in, composed entirely of American capitalists, proposes to build large reduction and refining works at Sault Ste. Marie, to cost $1,500,000, that will give employment to 1,000 men and will have a capacity of 1,000 tons a day. These works, which are now under construction and are expected to be ready for operation by June 1, will treat nickel, copper and other ores from all over Ontario. The company is also erecting chemical works in connection with the reduction works for utilizing sulphur and producing sulphurous anhydride for use in sulphide pulp mills. Alkali plants are also being built for the production of caustic acid and bleaching powder. The chemical works will cost $500,000, while the alkali plants will involve an outlay of $1,500,000. The company also intends to erect a sulphide pulp mill costing $250,000 and a steel rail mill costing about $2,500,000 and having a capacity of 1,000 tons of steel rails daily. The total expenditure on the works will be over $7,000,000.

PUEBLA, MEX.—Reports state that the Geo. L. Squier Mfg. Co., Buffalo, N. Y., has been awarded the contract to extend the sugar plant of Jose Diaz Rubin, of Puebla, to cost about $300,000.

RUSSIA.—Thomas Smith, U. S. Consul at Moscow, who sailed from the United States on Jan. 17, has authority from four manufacturing concerns in the United States to negotiate the preliminary steps for building plants in Moscow and St. Petersburg, to cost about $6,000,000, with probably a further addition of $8,000,000. The Westinghouse Electric & Mfg. Co., Pittsburg, Pa., will build a $2,000,000 manufacturing plant in St .Petersburg, the Standard (International?) Pump Co., New York, including Henry R. Worthington and others, will build a $2,000,000 plant in St. Petersburg or Moscow, and the Singer Sewing Machine Co., Singer Bldg., New York, will build a factory in Moscow, with warerooms in St. Petersburg. Three other American concerns will erect plants in Russia.——It is said that N. D. & J. D. Diamantidi have formed a company, with a capital of $300,000, to build starch and soap works in Taganrog.——The Bibi-Eibat-Naphtha Gesellschaft has been organized in St. Petersburg, capital, $1,250,000, to work naphtha deposits of Bibi-Eibat, in the Bapu district.

GERMANY.—Reports state that the Deutsch-Venezolanische Schwefelgruben-Actiengesellschaft, capital 2,000,000 marks, has been formed in Kohn, to work the sulphur deposits near Carnpano, Venezuela, and to construct a wire rope railway from the deposits to the coast, 10½ miles.——Benedikt Muller, of Reckmuhl, near Freising, will erect a bicycle and motor factory.——The Kali-Bohrgesellschaft, Hannovera, intends to work the lignite deposits of Lobstedt, near Leipzig; also to construct a briquette factory. Mr. Johann, of Lansingk, is the Director.——O. L. Kummer & Co., 22 Waisenhausstrasse, Dresden, will erect machine shops in Jeplitz, Austria.——A. Fleischer, of Reichenbach, will add 150 new looms to his linen and cotton weaving works.——The Apt. Ges. Walzengiesserei vorm Kolsch & Co., has been formed in Siegen, capital 1,100,000 marks, to manufacture twin iron rolls, etc.——A plant to manufacture telegraph wire cables and other electrical appliances will be built in Mannheim by the Mannheimer Telegraphendraht und Kabelfebelk vorm. C. Schlacherer; capital 1,000,000 marks.——H. Wulff, 158 Kaiserstrasse, Dortmund, is President of the Iserlohner Brauerei, capital, 1,000,000 marks, to erect a brewery in Iserlohn.——A rubber factory will be erected by the Bremer Gummiwerpe Roland Apt.-Ges. Johann G. Wolde, 647 Rembertistrasse, Bremen, is a director.——The Vereinigte Glauzstofffabriken Actiengesellschaft, of Rachen, will erect three silk factories.——A paint making factory will be erected in Heerdt-on-the-Rhine by the Farbenindustrie Actien Gesellschaft.——A cement factory will be erected in Trillau by Bebruder E. Sarpander.——Steel works will be erected in Heedrt by the Stahlwerk Krieger Actiengesellschaft.——The sugar factory of Baron Carl Stummer, in Tyrnau, Hungary, destroyed by fire in November, will soon be rebuilt, to cost about 1,000,000 gulders.——G. Marburg & Sons will erect a weaving mill with 300 looms in Bekes-Csaba, Hungary; cost, about 600,000 guldens.——Josef Becker, of Husten, will erect tile works.——Ludwig Hagelauer, of Lossenheim, will erect tile works.——Brauhaus Essen, Ltd., has been formed in Schonebeck to erect breweries, etc.; capital, 1,200,000 marks.

SHANGHAI, CHINA.—The Shanghai Pulp & Paper Co., Ltd., recently formed, capital 450,000 taels, will erect mills.——Public baths will be erected by Chas. Mayne, of Kankow Road, Shanghai.

BANGKOK, SIAM.—It is stated that the Bangkok Mfg. Co., Ltd., will erect an ice making plant and cold storage warehouses, a steam laundry and a 3½-ton rice-flour mill. L. E. Bennett, Mgr., New Road and American Legation Lane, Bangkok.

GAS PLANTS.

NEWARK, N. J.—Bids are asked for about 1,100 12-in. spruce piles in place, 2,000 cu. yds. excavation, 700 cu. yds. gravel filling, 325 cu. yds. Portland concrete, 51,000 ft. B. M. 3-in. spruce planking, 3,400 ft. B. M. 12 × 12-in. spruce capping, 1,800 cu. ft. brickwork, as stated in our advertising columns. J. A. Perry, care Market St. Gas Works.

PALMYRA, N. J.—D. L. Summey, Supt., writes us that no specifications were issued for laying about four miles of gas main. The company will do the work itself in the spring.

RIVERTON, N. J.—F. H. Shelton writes us that no bids were opened Jan. 5 for laying three miles of gas mains. The work is off for the present.

TOLEDO, O.—The courts have issued an injunction restraining Mayor Jones from selling the city natural gas plant to Kerlin Bros. for $228,000.

MILWAUKEE, WIS.—The contract for constructing a 4-lift holder, capacity 3,000,000 cu. ft., for the Milwaukee Gas Light Co., has been let to the Riter-Conley Mfg. Co., 39 Cortlandt St., New York.

MISCELLANEOUS CONTRACTS.

PARK.—Fortville, Ind.—The Union Traction Co. has purchased 160 acres of land for a park.

PARK.—Akron, O.—Col. Geo. T. Perkins has given the city 80 acres of land for a public park.

PIER.—Philadelphia, Pa.—The city will erect a recreation pier and dock at the foot of Race St.

CRANE.—Sundsvall, Sweden.—The municipality invites bids for furnishing a ten-ton hand power crane.

TELEPHONE.—Springfield, Mo.—The Kansas City Mutual Telephone Co. has been granted a franchise.

DREDGING.—Passaic, N. J.—The board of trade has asked the city to appropriate money for dredging the harbor.

FERRY.—New York, N. Y.—It is stated that the D., L. & W. R. R. will build a ferry line from 42d St. to Hoboken.

GRANITE.—Boston, Mass.—Bids are asked until Jan. 22 for furnishing the penal institution with granite. E. C. Marshall, Comr.

PARK WORK.—Cleveland, O.—The Park Board has authorized Engineer Pratt to advertise for bids for several park improvements.

YACHT HARBOR.—Highland Park, Ill.—It is stated that F. W. Cushing and others will build a yacht harbor to cost about $50,000.

LOCK GATE.—St. Paul, Minn.—Bids are asked until Jan. 22 for constructing one lock gate. Maj. F. V. Abbott, U. S. Engr., Globe Bldg.

GUNS.—Ft. Mott, N. J.—Bids are asked by the commanding officer until Feb. 15 for furnishing three 10-in. Rodman guns, 3 Barbette carriages.

MINING OUTFIT.—Marion, Ill.—The Southern Ill. Coal & Mining Co. will purchase a complete second-hand coal mining outfit. I. B. Turnell, Gen. Mgr.

MINING.—Vancouver, B. C.—The Claims of the White Horse Copper mines have been transferred to the Rothschilds, of London, who will develop them.

IMPROVEMENT BONDS.—Baton Rouge, La.—Bids are asked, according to reports, for the purchase of $135,000 of improvement bonds. R. A. Hart, Mayor.

SHAFT.—Belleville, Ill.—The Royal Coal & Mining Co., 924 Century Bldg., St. Louis, will receive bids for sinking a shaft on the L. & N. R. R., near here.

DRY DOCKS.—Washington, D. C.—It has been decided to construct the dry docks, at League Island and Mare Island Navy Yards, of stone, instead of wood.

BULKHEAD.—Jacksonville, Fla.—Philip Prioleaw has submitted plans for bulkheading the streets on the river front, for which $25,000 has been appropriated.

COAL DOCKS.—Toledo, O.—It is stated that the Ohio Central Lines and the Hocking Valley Ry. will spend about $1,000,000 in building coal docks and shops

IMPROVEMENT BONDS.—Socorro, N. Mex.—Bids are asked until Feb. 5 for the purchase of $160,000 of improvement bonds. A. Schey, Chn. County Comrs.

IMPROVEMENT BONDS.—Indianapolis, Ind.—Bids are asked until Jan. 31 for the purchase of $100,000 of 3½% improvement bonds. Albert Baker, Chn. Finance Com.

STONE.—New York, N. Y.—Bids are asked by the Department of Docks & Ferries, Pier A, N. R., until Jan. 26, for furnishing granite stones for bulkhead or river wall.

GUNS AND AMMUNITION.—Skipanon, Ore.—Bids are asked until Feb. 10 for purchasing a quantity of guns and ammunition at Fort Stevens. 1st Lieut. W. A. Bethel, 3d Art.

RIVER IMPROVEMENTS.—Riverhead (L. I.), N. Y.—It is stated that President Foster of the Village Improvement Society will ask for $20,000 for improving Peconic River.

LEVEE.—Baton Rouge, La.—The contract for building a protecting levee, along the Mississippi River, including about 50,000 cu. yds. of dirt filling, has been let to C. W. Slattery.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked until Jan. 23 for furnishing a quantity of pipe and fittings at the League Island Navy Yard. A. S. Kenny, Paymaster-General, U. S. N.

NAVAL SUPPLIES.—New York, N. Y.—Bids are asked until Jan. 23 for furnishing a quantity of bolts, rivets, etc., at the New York Navy Yard. A. S. Kenny, Paymaster-General, U. S. N.

AMMUNITION HOISTS.—New London, Conn.—Bids are asked until Feb. 17 for furnishing ammunition hoists and delivery doors, as stated in our advertising columns. Maj. S. S. Leach, U. S. Engr.

COAL LAND DEVELOPMENT.—Louisville, Ky.—We are informed that the Inter-State Investment Co. is trying to ascertain the cost of developing about 7,000 acres of coal land. C. T. Bollard, Pres.

DREDGING.—Philadelphia, Pa.—Bids are asked by the Board of Port Wardens until Feb. 6 for dredging docks and in front of bulkheads not belonging to the city. Joel Cook, Pres.; G. F. Sproule, Secy.

DOCK.—Hong-Kong, China.—A graving dock will be built under the direction of R. D. Ormsby, Dir. Pub. Wks., Albert-Road, Hong-Kong, as the Naval Works bill recently passed provides for its carrying out.

DREDGING.—Milford Haven, Va.—Bids are asked until Feb. 12 for dredging at Milford Haven, as stated in our advertising columns. Lieut.-Col. Chas. J. Allen, U. S. Engr., 601 18th St., N. W., Washington.

SOLE PLATES.—Cork, Ireland.—Bids are asked until Feb. 1 for furnishing 100 tons of steel sole plates for the Cork, Bandon & South Coast Ry. J. R. Kerr, Engr., Bandon, Irc.; R. H. Leslie, Secy., Cork.

CHEMICAL ENGINES.—York, Pa.—Frank Geise, Mayor, writes us that on Feb. 20 the question of issuing $7,000 in bonds for the purchase of chemical engines and $1,000 for park improvements will be voted on.

JETTIES.—Florida.—Bids are asked until Feb. 17 for constructing jetties at entrance to Cumberland Sound, Georgia and Florida, as stated in our advertising columns. Capt. C. H. McKinstry, U. S. Engr., Jacksonville.

COAL.—Copenhagen, Denmark.—Reports state that bids are wanted at once by Kobenhavns Belysning-Svoesen, Vestre Boulevard, Kjobenhavn, V., for furnishing about 140,000 tons of best gas coal, all to be delivered by 1901.

FILLING.—Jersey City, N. J.—The Street and Water Commissioners are considering the question of filling in about 23,000,000 cu. yds. of land on New York Bay between Constable Hook and Liberty Island, to provide more wharf room.

DOCK.—Bermuda Islands.—The construction of the graving dock recently provided for in the Naval Works bill will soon be commenced. The work will be difficult, as the stone is very porous and sunken coral reefs surround the islands. Lt.-Gen. Geo. D. Barker, Governor.

CANAL WORK.—Charleroi Canal, Belgium.—Reports state that Primier De Smet de Nayer, Brussels, proposes to widen the Charleroi Canal to permit the passage of Rhine barges. It is part of the programme to levy a duty of 19 cts. per 220 lbs. on refined salt imported.

TUNNELS.—West Virginia.—C. H. Latrobe, Consult. Engr., Room 813 Merchants' Bank Bldg., Baltimore, Md., writes us that the contract for two tunnels on the line of the Coal & Iron Ry. in West Virginia, one 1,600 ft. long and one 1,000 ft. long, advertised in Engineering News, has been let to Rosser, Coleman & Hoge, Frankfort, Ky.

TRANSIT TUNNEL.—New York.—The contract for building the rapid transit tunnel has been let to J. B. McDonald, 100 Broadway, and Jerome Park Reservoir, at $35,000,000. Work on the four sections will begin within 30 days, and each pushed simultaneously to completion. Andrew Onderdonk, 1 Broadway, submitted the only other bid, at $39,300,000.

HARBOR WORK.—Coatzacoalcos, Mexico.—The harbor work, etc., at this place and at Salina Cruz, Mex., to be done in connection with the reconstruction of the Tehuantepec Ry., will cost about $14,000,000. S. Pearson & Son, Ltd., Contractors, 10 Victoria St., Westminster, London, Eng., are at the head of the work, their representative in Mexico being J. B. Body, 15 Puente de Alvarado, Mexico City. (See item under Railways.)

REMOVING WRECK.—Port Clinton, O.—Col. J. A. Smith, U. S. Engr., 185 Euclid Ave., writes us that the following bids were received Jan. 12 for removing the wreck of the schooner "Onward" and cargo: John J. Stang, Lorain, O., $280; Chas. R. Dittrick, Glenville, O., $550; Geo. Maul, Port Clinton, O., $15; Edward Haas, Put-in-Bay, O., $1,000; Harris W. Baker, Detroit, Mich., $198; Chas. E. Dahlke, Cleveland, O., $494.

IMPROVEMENT BONDS.—New York, N. Y.—Bids are asked until Jan. 23 for the purchase of $5,568,483.90 3½% improvement bonds, as follows: $2,000,000 for the new East River bridge; $450,000 for a new Hall of Records; $300,000 for school houses and sites; $500,000 for school houses in Brooklyn; $368,483.90 stock for high schools and sites; $300,000 for driveway along Harlem River; $1,650,000 for new aqueduct. Bird S. Coler, Cy. Compt.

SHAFTS AND TUNNELS.—Carnarvon, Wales.—Bids are asked until Jan. 31 for sinking a shaft, to be about 465 ft. deep and 9 × 9 ft. area, and one to be 131 ft. deep and 7 × 6 ft. area, the last already begun, and also for driving a tunnel from the bottom of one of these shafts to the bottom of the other. The tunnel to be about 420 ft. long and 7 ft. high and 6 ft. wide. The work is all in granite and slate rock. John Williams & Co., Dorothea Quarry Offices, Carnarvon.

CONTRACT PRICES.

PIER EXTENSION.—Portage, Mich.—The following bids were received Jan. 15, for pier extensions in Portage Lake, Mich., as advertised in Engineering News; Capt. Chester Harding, U. S. Engr.; all except Butler-Ryan Co., St. Paul, Minn., and McLeod & Newcombe, Manistee, Mich., are of Muskegon, Mich.:

Bids Received at Portage, Mich., Jan. 15, 1900, for Pier Extensions in Portage Lake, Mich.

Quantities.		Bennett & Schnorbach.	Smith & Nelson.	Robert Love.	Butler-Ryan Co.	McLeod & Newcombe.
Dredging	12,141 cu. yds.	$0.46	$0.40	$0.50	$0.35	$0.50
Foundation piles	18,978 lin. ft.	.50	.50	.60	.40	.50
Oak guard piles	1,196 " "	.35	.40	.50	.20	.20
" timber	7,524 ft. B.M.	45.00	50.00	50.00	40.00	50.00
Pine timber	875,200 " "	28.00	29.00	30.00	25.50	28.00
Hemlock timber	2,112,370 " "	22.50	24.00	24.00	23.40	24.00
Pine planks	97,050 " "	25.00	25.00	25.00	25.50	25.00
Drift bolts	356,326 lbs.	.03¾	.04	.04	.03½	.04
Screw bolts	41,202 "	.03¾	.04	.04	.04	.04
Spikes	6,435 "	.04	.04	.04	.04	.04
Stone	5,836 cords	6.75	6.50	6.75	9.00	8.00
Total		$144,849	$147,796	$153,362	$153,503	$157,009

DREDGING.—Boston, Mass.—Col. C. R. Sutter, U. S. Engr., received the following bids Jan. 9, 1900, for about 836,082 cu. yds. of dredging in Broad Sound, Boston, Harbor, from President Roads to the sea, to obtain a channel 1,200 ft. wide and 30 ft. deep at mean low water; (1) is price bid for dredging a cu. yd. (scow measurement); (2) for removing boulders over 6 tons, each, a cu. yd.:

	1.	2.
Eastern Dredging Co., Boston, Mass.	$0.72	$25.00
Atlantic Dredging Co., New York, N. Y.	.80	15.00
G. H. Breymann & Bros., Toledo, O.	.35	24.00

BREAKWATER.—Michigan City, Mich.—Capt. Chester Harding, U. S. Engr., received the following bid Jan. 13, 1900, for constructing breakwaters at Michigan City; all bidders of Chicago:

Street Lighting Co., of America, Philadelphia, not less than 50 60-c. p. Welsbach street lights at $32 per annum each.

PUBLIC LIGHTING.—Pittsburg, Pa.—The following contracts have been let for public lighting for four years from Jan. 1, 1900: The Pennsylvania Globe Gas Light Co., four years, 16-c. p. gasoline lamps for street and alley lighting, $19.37 a year; the Allegheny County Light Co., $1,000 and 2,000-c. p. standard arc lamps for street lighting at $90 and $96 a year per light.

DREDGING.—New London, Conn.—Reports state that Henry C. Dubois Sons & Co., 119 South St., New York, have been awarded the contract for 60,000 yds. of dredging at the New London Naval Station, at 9 cts. a yd. There were seven other bids, ranging from 9 to 14¾ cts.

Bids Received at Michigan City, Mich., Jan. 13, 1900, for Constructing Breakwaters.

Quantities.		Stebbins & Wenzell.	Christie, Heyworth & Lowe.	Hausler & Lutz Towing & Dock Co.	Fitz Simons & Connell Co.	Pound Construction Co.
Dredging	250 cu. yds.	$1.00	$1.00	$0.99	$0.40	$2,00
Foundation piles	9,511 lin. ft.	.30	.65	.70	.35	.50
White oak	9,792 ft. B.M.	50.00	36.00	40.00	40.00	42.00
" pine timber	1,547,848 " "	30.80	34.00	30.00	30.00	28.00
Hemlock timber	3,171,400 " "	24.00	25.50	25.00	24.50	22.00
White pine decking	303,354 " "	25.00	33.00	40.00	28.00	27.00
Drift bolts	549,696 lbs.	.04	.04	.035	.04	.05
Screw bolts	20,476 "	.04	.04	.035	.06	.05
Spikes	27,712 "	.04	.04	.05	.06	.05
Stone	14,420 cords	7.50	7.00	7.75	8.50	9.50
Total		$267,029	$275,148	$278,248	$283,696	$293,852

EXTENDING PIER.—St. Joseph, Mich.—In the list of bids for this work, published in our issue of Jan. 11, we find that there was an accidental omission of one bid. This was by the Fitz Simons & Connell Co., of Chicago, and was next to the lowest bid. The prices of the bid, as furnished us by the company were as follows:

Dredging, crib foundation	12,000 cu. yds.	$0.30
Foundation piles	38,473 lin. ft.	.25
White oak guard piles	1,196 " "	.30
" timber	7,866 ft. B.M.	40.00
White pine timber	1,610,767 " "	28.50
Hemlock timber	3,787,142 " "	23.50
White pine plank	189,200 " "	25.00
Drift bolts	627,398 lbs.	.04¼
Screw bolts	702,420 "	.05½
Spikes	12,385 "	.05
Stone filling and rip-rap	11,430 cords	8.25
Total		$282,818

CEMENT.—St. Paul, Minn.—Maj. F. V. Abbot, U. S. Engr., received the following bids Jan. 2, 1900, for furnishing 55,000 bags of cement of 100 lbs. each: Commercial Wood & Cement Co., 156 Fifth Ave., New York, 50 cts. for Saylor's Portland, f. o. b. Coplay, Pa.; Kelley Island Lime & Transfer Co., Cleveland, O., 56¼ cts., Lehigh, f. o. b. Ormrod, Pa.; Diamond Portland Cement Co., Cleveland, O., 54 cts., Diamond Portland, f. o. b. Middle Branch, O.; Northwestern Lime Co., St. Paul, Minn., 70 cts., Atlas Portland, f. o. b. Minnesota Transfer, Minn. (at opening of navigation on the lakes).

ROAD.—Puerto Rico.—We are informed that the following bids were received Dec. 23 for constructing about 18 miles of road in Puerto Rico, as advertised in Engineering News; bid of Central Contracting Co., 99 Cedar St., New York city, was recommended for acceptance; Capt. W. V. Judson, U. S. Engr., Pres. Bd. Pub. Wks., San Juan, Puerto Rico:

the palace being constructed by American contractors for the Crown Prince of Japan. There are 72,000 sq. ft. of floor area in the palace.

THE ROBINS CONVEYING BELT CO., 147 Cedar St., New York, has recently installed a belt conveying system at the new boiler house of the New Jersey Zinc Co. for handling its coal. The conveyor receives the coal through a hopper below the railway tracks, elevates it to the top of the building and distributes it into six storage tanks in front of the boilers. The capacity is 40 tons of buckwheat coal an hour.

NEW COMPANIES.—Electric Boiler Protection Co., New York, N. Y.; $100,000; W. B. Brauer, J. C. Beebe.

Middle States Construction Co., Corporation Trust Co. Bldg., Jersey City, N. J.; $10,000,000; Charles MacVeagh, Allen Wardell.

Iron Gate Furnace Co., New Jersey Corporation Guarantee & Trust Co. Bldg., Camden; $100,000; Chester R. Baird, Nicholas H. Wagner.

Pennsylvania Bluestone & Quarry Co., 94 Montgomery St., Jersey City; capital, $100,000; Edward A. Reser, Hawthorne, N. J.

Electrozone Mfg. Co., Los Angeles, Cal.; $150,000; A. G. Hall, B. White.

United Light & Power Co., Philadelphia, Pa.; $5,000,000; L. E. White, New York, N. Y.; C. G. Blandy, Newark, Del.

Washington Telephone & Telegraph Co., Corporation Trust Co. Bldg., Jersey City; $1,500,000; Seymour Mandelbaum, Thomas J. Hayward.

Murphy Safety Third Rail Electric Co., Clinton & Beaver Sts., Newark, N. J.; $2,500,000; Charles T. Hayman, Cincinnati, O.; Geo. H. Carey, New York.

Northwestern Construction Co., Minneapolis, Minn.; $50,000; J. C. Slafter, A. Dinsmore.

General Service Automatic Co., Corporation Trust Co. Bldg., Jersey City; $25,000; Jacob C. Olsen, Chas. E. Souther.

Electric Regulator Co., 294 Bloomfield Ave., Montclair, N. J.; $125,000; Eri F. Wilson, Roger Williams.

Universal Water Lift Co., New York, N. Y.; $500,000; G. A. Crofutt, J. Vincent.

New York & Philadelphia Telephone, Telegraph & Cable Co., 55 Montgomery St., Jersey City, N. J.; $100,000; Geo. W. Beers, Ft. Wayne, Ind.

Dominion Oil & Pipe Line Co., Cleveland, O.; $100,000; J. T. Murphy, C. P. Moore.

Nebraska Brick Co., South Omaha, Neb.; $40,000; T. E. Parmlee, W. B. Hughes.

Merchant Switch Mfg. Co., Rochester, N. Y.; $50,000; Geo. E. Merchant, Gerald E. Merchant.

Atlantic Highlands Wharf Co., Atlantic Highlands, N. J.; $30,000; Peter S. Conover, Jr., Arch. G. Hall.

Gest Asphalt Paving Co., Cincinnati, O.; $100,000; G. N. Gest, G. S. Eustice.

BIDS RECEIVED AT SAN JUAN, PUERTO RICO, DEC. 23, 1899, FOR ROAD CONSTRUCTION.

Bidder.	Excavation, Solid rock, 135,000 cu. yds.	Loose rock, 29,500 cu. yds.	Earth, 90,000 cu. yds.	In water, 800 cu. yds.	Broken stone and screenings, 45,000 cu. yds.	Masonry, First-class, 800 cu. yds.	Second-class, 430 cu. yds.	Third-class, 5,300 cu. yds.	Box-culvert (laid dry), 300 cu. yds.	Retaining wall (dry), 650 yds.	Slope wall, 382 cu. yds.	Rip-rap, 500 yds.	Paving (laid dry), 300 cu. yds.	Paving grouted, 350 cu. yds.	Brick mas'ry laid in cem., 670 yds.	Concrete, 2,000 cu. yds.	Drain pipe, 18-in., 3,000 lin. ft.	15-in., 1,000 lin. ft.	12-in., 1,000 lin. ft.	Timber (foundatn) incldg sht pilg, 25 M. ft.	Piling, 4,000 lin. ft.	Iron (timber wrk), 2,000 lbs.	Total
Carlos de Erno, San Juan	$0.50	$0.23	$0.16	$2.50	$1.90	$28.00	$19.00	$6.70	$2.20	$2.20	$2.20	$3.00	$2.20	$6.70	$12.00	$10.00	$0.80	$0.70	$0.60	$35.00	$1.50	$0.10	$288,515
Marix & Denton, San Juan	.45	.25	.15	1.00	1.50	35.00	12.00	10.00	2.00	1.90	1.90	1.90	1.90	5.00	10.00	10.00	.90	.50	.40	30.00	1.00	.30	277,566
Central Contracting Co., New York.	.45	.30	.18	1.50	1.25	21.50	16.50	6.80	2.30	2.20	2.00	1.90	2.50	4.50	11.00	9.50	.90	.70	.50	50.00	.50	.15	243,564
H. R. Gamble, St. Louis, Mo.	.91	.55	.24	1.00	2.41	41.00	22.00	9.80	3.50	5.60	4.20	2.80	2.10	5.00	30.00	11.00	.90	.89	.75	65.00	.91	.21	426,324
Puerto Rico Company, San Juan	2.00	.70	.35	6.00	2.50	15.00	12.00	10.00	8.00	8.00	6.00	4.00	3.50	4.00	14.00	8.00	2.40	2.00	1.50	90.00	2.00	.10	570,482
W. H. Kendrick, Tampa, Fla.	1.35	.45	.25	2.00	2.00	30.00	20.00	15.00	10.00	8.00	8.00	2.50	2.50	3.00	25.00	5.00	1.00	.75	.75	40.00	.50	.08	470,441
Wright & Lindsley, Orange, N. J.	1.50	.60	.30	5.00	2.80	24.00	18.00	10.00	6.00	6.00	5.00	2.00	2.00	5.00	12.50	10.00	2.20	2.00	1.70	80.00	2.50	.15	519,075
Indiana Const'n Co., Terre Haute.	.90	.48	.29	3.00	1.40	20.00	10.00	8.00	2.50	2.00	1.50	1.00	1.00	2.00	14.00	14.00	1.00	.90	.75	50.00	.50	.10	339,463
Degnon-M'Lean Const'n Co., N. Y.	1.05	.60	.30	2.00	2.00	18.00	15.00	7.00	5.00	5.00	3.50	2.50	2.50	5.50	18.00	11.00	2.00	1.80	1.60	60.00	.70	.10	393,972
Jno. B. Carter, New York	.80	.40	.22	2.00	2.25	16.00	12.00	9.00	4.00	3.50	3.50	2.00	2.00	5.00	10.00	10.50	2.00	1.75	1.50	40.00	.60	.15	356,922
Mullenhoff & Korber, San Juan	.53	.35	.24	1.80	2.00	37.00	19.60	11.90	3.00	8.00	1.80	1.30	2.00	5.00	11.50	14.00	4.00	2.00	1.50	54.00	.40	.10	360,156
J. D. Colon, San Juan	.52	.30	.25	1.75	2.05	32.00	17.00	8.00	2.50	2.25	2.25	2.25	1.50	8.00	10.00	10.00	.90	.80	.70	55.05	1.00	.25	314,733
Roque Paniagua, San Juan	.65	.50	.30	1.00	2.15	30.00	18.00	9.50	2.50	8.00	4.00	3.00	3.50	6.00	15.00	14.00	2.14	1.94	1.75	58.00	1.15	.30	376,078
A. J. Wellington, Boston, Mass.	1.00	.40	.30	2.00	1.70	25.00	15.00	8.00	3.00	3.00	1.80	1.00	1.00	1.50	14.00	8.00	.60	.55	.50	80.00	.30	.08	357,203
David V. Howell, New York	1.10	.40	.20	.35	1.08	14.00	12.00	9.00	6.00	7.00	7.00	1.50	1.70	1.80	12.00	7.50	.28	.24	.21	60.00	.32	.08	329,424
Edw. J. Hingston, Buffalo, N. Y.	.95	.50	.25	2.00	2.25	14.00	10.00	7.00	5.00	5.00	4.00	2.50	2.50	3.50	10.00	7.00	1.50	1.25	.90	35.00	.40	.06	360,398
Del. Granite & Mining Co., Wilmgtn	.75	.50	.23	.75	.75	10.50	7.50	5.50	3.50	1.50	1.25	1.00	1.00	1.25	8.50	7.00	1.00	.65	.50	40.00	.35	.09	241,990

PAVING.—New Orleans, La.—The following bids were received Jan. 2, 1900, for certain paving: Frenchmen St., shells, from Gentilly Road to Milneburg: D. & J. Tranchina, 65 cts. a sq. yd.; Thos. Egan, 55¾ cts.; J. M. Kelly, 74 cts. Schillinger sidewalks, along St. John's Market, on Delaronde St., from Amann to Baumann: J. F. Brennan, Schillinger, $1.49 a sq. yd.; Belgian block, $5.15, bluestone, a sq. ft., 60 cts. Jos. A. Craven & Co., Schillinger, $1.75; Belgian block, $3.25; bluestone, 50 cts. Common St., from Baronne to St. Charles, asphalt: Barber Asphalt Paving Co., $2.90 a sq. yd.; Louisiana Improvement Co., $2.50; John J. Frawley, $2.65; Ayers Asphalt Co., $2.75. Gravier St., from Baronne to South Rampart, asphalt: Barber Asphalt Paving Co., $2.90; Louisiana Improvement Co., $2.50; John J. Frawley, $2.65; Ayers Asphalt Co., $2.75.

SEWERS.—New York, N. Y.—The following bids were received Jan. 10, for a sewer in Kirkside Ave.; the bids for concrete masonry, broken stone, timber and 6 to 18-in. drains were all the same and are covered by the one column:

Bids Received at New York, N. Y., Jan. 10, 1900, for Constructing a Sewer in Kirkside Ave.

Bidder.	Pipe sewers, 18-in., 85 lin. ft.	15-in., 640 lin. ft.	12-in., 1,380 lin. ft.	Spurs, 590 each.	Man-holes, 21 each.	Rock excav., 4,500 cu. yds.	C'ncr'te mas'ry, etc.	Total.
E. J. McLaughlin, 585 E. 134th St.	$4.00	$3.00	$2.50	.....	$155.00	$2.00	.....	$17,965
Wm. F. Norton, 147 E. 125th St.	3.00	3.00	3.00	.....	50.00	3.00	.....	20,865
Thielmann & Smith, 303 W. 93d St.	8.00	8.00	8.00	.....	55.00	.....	.....	17,955
Walter J. Ford, 129 E. 125th St.	3.00	3.00	2.00	$0.50	50.00	3.00	$0.01	19,780
George Clark, 4225 Third Ave.	3.00	2.50	2.00	1.00	50.00	2.70	.01	18,405
J. S. Rogers, 340 E. 125th St.	2.90	2.90	2.70	.70	76.00	2.50	.01	19,088
James Dempsey, 429 E. 58th St.	8.00	8.00	8.00	1.50	100.00	.01	.10	19,904
A. C. Gildersleeve, 39 Cortlandt St.	7.00	6.50	6.50	.01	40.00	1.00	.01	19,071
Wm. J. Moore, 170 E. 89th St.	9.00	9.00	9.00	1.00	50.00	.01	...	20,655
B. J. Sullivan, St. Paul Bldg.	2.70	2.70	2.70	...	.....	2.00	...	14,683
John J. McQuade, 201 E. 89th St.	3.00	2.75	2.50	1.00	50.00	2.75	...	19,505
J. H. Kerrigan, New York	3.00	3.00	2.50	...	64.00	2.50	...	18,219
P. F. Brennan, 721 E. 180th St.	2.50	2.50	2.50	.10	60.00	2.75	...	19,006

ELECTRIC LIGHTING.—Corry, Pa.—Geo. A. Nantes, Cy. Clk., writes us that the following bids were received Jan. 8, 1900, for electric lighting; the bids, however, being rejected: E. M. & E. E. Love, Corry, 80 2,000-c. p. arc lights, and 50 16-c. p. incandescent lights, per annum, $5,200, extra lights, $65; Co-operative Electric Mfg. Co., Corry, 80 2,000-c. p. arc lights and 50 16-c. p. incandescent lights, $4,720; Climax Mfg. Co., Corry, 50 2,000-c. p. arc lights, and 50 16-c. p. incandescent lights, $72 per annum and $30 each for incandescent; Welsbach

INDUSTRIAL NOTES.

THE PITTSBURG LOCOMOTIVE & CAR WORKS, Pittsburg, has opened an office at 26 Victoria St., Westminster, London.

THE UNION SWITCH & SIGNAL CO., Swissvale, Pa., has removed its New York office from 43 Cedar St. to 26 Cortlandt St. Mr. H. M. Sperry is Signal Engineer and Agent.

THE KINNEAR MFG. CO., Columbus, O., has succeeded to the business of the steel rolling shuttle department of the Kinnear & Gage Co. The Kinnear & Gage Co. will continue the manufacture of its patent ceilings, wainscoting, etc.

THE KINGSFORD FOUNDRY & MACHINE WORKS, Oswego, N. Y., report that it is very busy in all departments, running 13 hours a day and unable to keep up with orders for marine engines, centrifugal pumping machinery and marine boilers.

A. O. NORTON, Boston, Mass., and Coaticook, Quebec, Canada, has built a 75 × 35-ft. 2-story addition to his Canadian plant, and reports enough orders already booked for his ball-bearing lifting jacks to keep both plants employed to the maximum of their capacity until April.

WM. B. SCAIFE & SONS, Pittsburg, are furnishing about 125 tons of curved corrugated steel sheets for the corrugated arches to be placed between the floor beams in

Philadelphia Dredging Co., Philadelphia, Pa.; $250,000; W. S. Drake, S. L. Harman.

Hoffman Engineering & Contracting Co., New Jersey Corporation Guarantee & Trust Co. Bldg., Camden, N.J.; $250,000; J. W. Hoffman, Frank R. Hansell.

American Power Carriage Co., Portland, Me.; $1,000,000; W. F. Hight, S. M. Nichols, Boston.

Sanitary Sewer Co., Philadelphia, Pa.; $300,000; J. H. Cromie, Jr., Camden, N. J.; G. S. Wertmer, Philadelphia.

Central Telephone & Telegraph Co., Dover, Del.; $125,000; W. C. Mayne, Bristol, Pa.; G. W. Kimball, Wilmington, Del.

Home Oil Co., Clarksburg, W. Va.; $1,000,000; F. G. Bland, C. E. Barr, M. G. Sperry.

American Oil & Asphalt Co., Los Angeles, Cal.; $500,000; S. Abbott, W. E. Dunn, A. Crutcher, Los Angeles.

Howard Automobile Co., 306 E. State St., Trenton, N.J.; $200,000; Frank H. Williams, Geo. B. Yard, Trenton.

Iowa Automatic Fire-Alarm Co., Newton, Ia.; $50,000; F. H. Bergman, E. A. Haynes, A. C. Gates, Newton.

Standard Water-Tower Co., Portland, Me.; $500,000; L. W. Gill, J. P. Colby, Boston; C. L. Marston, Portland.

Nonpareil Instantaneous Water-Heater Co., San Francisco, Cal.; $300,000; I. I. Brown, A. F. Vogelsang, C. A. Vogelsang, San Francisco.

Columbus Iron & Steel Co., Columbus, Ind.; $400,000; H. A. Marting, S. B. Steece, L. F. Frises.

London Fire-Brick & Coal Co., Fulton, Mo.; $200,000; E. W. Settle, J. C. Akely, Chicago, Ill.; S. E. Adams, Fulton.

National Mfg. & Contracting Co., Philadelphia, Pa.; $1,000,000; erecting and constructing buildings, etc.; J. W. Ellis, J. Gest.

Coppertown Mining & Smelting Co., Denver, Colo.; $250,000; A. L. Briggs, W S. Martin, H. Potvin, Denver.

German-American Portland Cement Co., Chicago, Ill.; $450,000; E. E. Prussing, R. A. Wildowson, R. E. Ross.

The Rochester Telephone Co., Rochester, N. Y.; $400,000; A. Voght, G. R. Fuller, Rochester; E. H. Satterlee, Pittsford.

Artesian Sanitarium Co., 1 Montgomery St., Jersey City, N. J.; $100,000; John W. Avery, Horace G. C. Thornton, Cranford, N. J.

East Side Oil & Gas Co., Visalia, Cal.; $272,000; R. F. Roth, Visalia; O. Kellogg, Parlier; J. E. Elwood, Sanger.

Basin Consolidated Mines, San Francisco, Cal.; $100,000; H F Buwer, London, England; J. O. Whitney, W. Martin, San Francisco.

Hatch Electric Smelting Co., Green Bay, Wis.; $2,000,000; F. E. Hatch, W. W. Anderson.

Wood Motor Cab Co., Chicago; $500,000; H. Goodman, C. T. B. Goodspeed.

If you want additional help, or to procure second-hand tools, machinery, plant, etc, try a "Want" card on page XXI

If you have anything to sell or to rent, we suggest that you advertise for a few weeks on one of our "For Sale" pages XXII-XXIII

If you want bids for doing any work, or for furnishing supplies, try an advertisement on a "Proposal" page XXV-XXVIII

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